



OWNER'S MANUAL

READ THIS MANUAL CAREFULLY,
IT CONTAINS IMPORTANT SAFETY INFORMATION.



MINIMUM RECOMMENDED OPERATOR AGE: 16

04

TRX400EX
Sportrax400EX

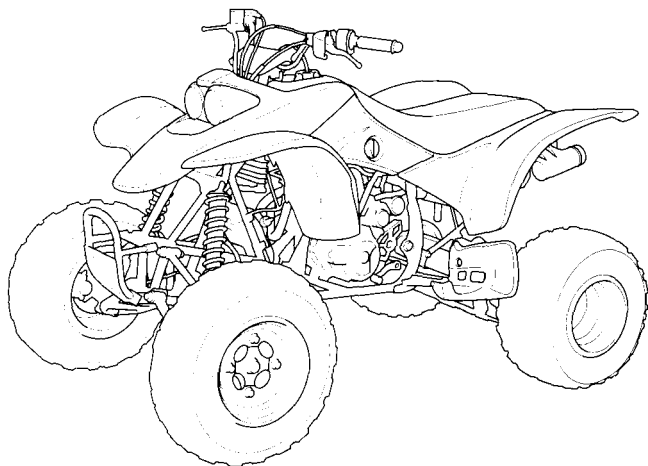
This manual should be considered a permanent part of the ATV and should remain with the ATV when it is resold.

This publication includes the latest production information available before printing. Honda Motor Co., Ltd. reserves the right to make changes at any time without notice and without incurring any obligation.

No part of this publication may be reproduced without written permission.

© Honda Motor Co., Ltd. 2003

**2004
Honda TRX400EX
Sportrax 400EX
OWNER'S MANUAL**



FOR OFF-ROAD USE ONLY

This vehicle is designed and manufactured for off-road use only.
USA only:

It does not conform to Federal Motor Vehicle Safety Standards, and operation on public streets, roads, or highways is illegal. The vehicle is equipped with a USDA qualified spark arrester. Obey local laws and regulations. It conforms to California exhaust emission regulations for ATVs.

Introduction

Congratulations on choosing your Honda ATV.

When you own a Honda, you're part of a worldwide family of satisfied customers — people who appreciate Honda's reputation for building quality into every product.

Your Honda was designed as a recreational ATV for off-road use by one rider only.

Before riding, take time to get acquainted with your ATV and how it works. To protect your investment, we urge you to take responsibility for keeping your ATV well maintained. Scheduled service is a must, of course. But it's just as important to observe the break-in guidelines, and perform all pre-ride and other periodic checks detailed in this manual.

We also recommend that you read this owner's manual before you ride. It's full of facts, instructions, safety information, and helpful tips. To make it easy to use, the manual contains a detailed list of topics at the beginning of each section, and both an in-depth table of contents and an index at the back of the book.

As you read this manual, you will find information that is preceded by a **NOTICE** symbol. This information is intended to help you avoid damage to your Honda, other property, or the environment.

Read the Warranties Booklet (page 191) thoroughly so you understand the coverages that protect your new Honda and are aware of your rights and responsibilities.

Whenever you ride, tread lightly. By staying on established trails and riding only in approved areas, you help protect the environment and keep off-road riding areas open for the future.

Introduction

If you have any questions, or if you ever need special service or repairs, remember that your Honda dealer knows your ATV best and is dedicated to your complete satisfaction.

Please report any change of address or ownership to your Honda dealer so we will be able to contact you concerning important production information.

You may also want to visit our website at www.honda.com.

Happy riding!

California Proposition 65 Warning

WARNING: This product contains or emits chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

A Few Words About Safety

Your safety, and the safety of others, is very important. And operating this ATV safely is an important responsibility.

To help you make informed decisions about safety, we have provided operating procedures and other information on labels and in this manual. This information alerts you to potential hazards that could hurt you or others.

Of course, it is not practical or possible to warn you about all hazards associated with operating or maintaining an ATV. You must use your own good judgment.

You will find important safety information in a variety of forms, including:

Safety Labels — on the ATV.

Safety Messages — preceded by a safety alert symbol  and one of three signal words: **DANGER**, **WARNING**, or **CAUTION**.

A Few Words About Safety

These signal words mean:

 **DANGER**

You **WILL** be **KILLED** or **SERIOUSLY HURT** if you don't follow instructions.

 **WARNING**

You **CAN** be **KILLED** or **SERIOUSLY HURT** if you don't follow instructions.

 **CAUTION**

You **CAN** be **HURT** if you don't follow instructions.

Safety Headings — such as Important Safety Reminders or Important Safety Precautions.

Safety Section — such as ATV Safety.

Instructions — how to use this ATV correctly and safely.

This entire manual is filled with important safety information — please read it carefully.

Contents

These pages give an overview of the contents of your owner's manual. The first page of each section lists the topics covered in that section.

ATV Safety	1
Important safety information you should know, plus a look at the safety-related labels on your ATV.	
Indicators & Controls	9
The location and function of indicators and controls on your ATV and operating instructions for various controls and features.	
Before Riding.....	23
The importance of wearing a helmet and other protective gear, how to make sure you and your ATV are ready to ride, and important information about loading.	
Basic Operation & Riding	37
How to start and stop the engine, shift gears, and brake. Also, riding precautions.	

Contents

Servicing Your Honda	67
Why your ATV needs regular maintenance, what you need to know before servicing your Honda, an owner maintenance schedule, and instructions for specific maintenance and adjustment items.	
Tips	149
How to store and transport your ATV and how to be an environmentally-responsible rider.	
Taking Care of the Unexpected	159
What to do if you have a flat tire, your engine won't start, etc.	
Technical Information	173
ID numbers, technical specifications, and other technical facts.	
Consumer Information	187
Information on warranties, emission controls, how to get Honda service manuals.	
Table of Contents	196
Sequential listing of topics in this owner's manual.	
Index	202
Quick Reference	
Handy facts about fuel, engine oil, tire sizes, and air pressures.	

ATV Safety

This section presents some of the most important information and recommendations to help you ride your ATV safely. Please take a few moments to read these pages. This section also includes information about the location of safety labels on your ATV.

Important Safety Information	2
Safety Labels.....	5

Important Safety Information

Your ATV can provide many years of service and pleasure — if you take responsibility for your own safety and understand the challenges you can meet while riding.

There is much that you can do to protect yourself when you ride. You'll find many helpful recommendations throughout this manual. The following are a few that we consider most important.

Follow the Age Recommendation

The minimum recommended age for this ATV model is 16. Children under age 16 should never operate this vehicle.

Always Wear a Helmet

It's a proven fact: helmets significantly reduce the number and severity of head injuries. So always wear an approved motorcycle helmet. We also recommend that you wear eye protection, sturdy boots, gloves, and other protective gear (page 24).

Never Carry a Passenger

Your ATV is designed for one person only. There are no handholds, footrests, or seat for a second person — so never carry a passenger. A passenger could interfere with your ability to move around to maintain your balance and control of the ATV.

Important Safety Information

Ride Off-Road Only

Your ATV is designed and manufactured for off-road use only. The tires are not made for pavement, and the ATV does not have turn signals and other features required for use on public roads. If you need to cross a paved or public road, get off and walk your ATV across.

Take Time to Learn & Practice

Even if you have ridden other ATVs, take time to become familiar with how this ATV works and handles. Practice in a safe area until you build your skills and get accustomed to the ATV's size and weight.

Because many accidents involve inexperienced or untrained riders, we urge all riders to take a training course approved by the ATV Safety Institute (ASI). See page 26.

Contact an authorized ATV dealer or call 1-800-887-2887 (USA only) to find out about the training courses nearest you.

Be Alert for Off-Road Hazards

The terrain can present a variety of challenges when you ride off-road. Continually “read” the terrain for unexpected turns, drop-offs, rocks, ruts, and other hazards. Always keep your speed low enough to allow time to see and react to hazards.

Important Safety Information

Ride within Your Limits

Pushing limits is another major cause of ATV accidents. Never ride beyond your personal abilities or faster than conditions warrant. Remember that alcohol, drugs, fatigue, and inattention can significantly reduce your ability to make good judgments and ride safely.

Don't Drink and Ride

Alcohol and riding don't mix. Even one drink can reduce your ability to respond to changing conditions, and your reaction time gets worse with every additional drink. So don't drink and ride, and don't let your friends drink and ride either.

Keep Your Honda in Safe Condition

It's important to keep your ATV properly maintained and in safe riding condition. Having a breakdown can be difficult, especially if you are stranded off-road far from your base. To help avoid problems, inspect your ATV before every ride and perform all recommended maintenance.

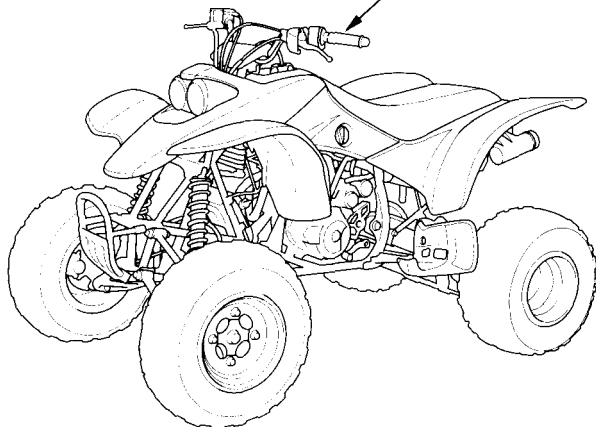
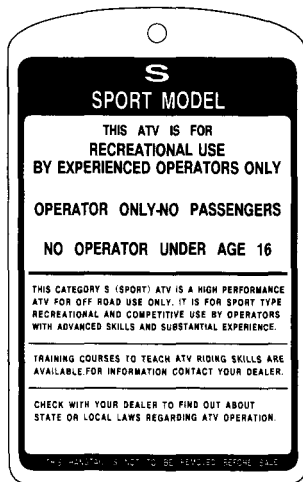
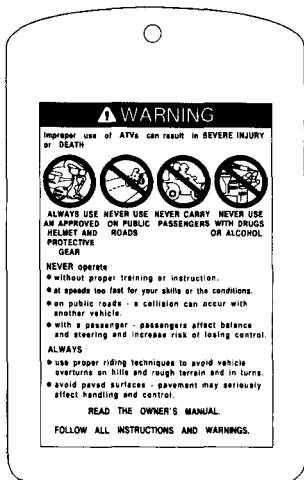
Safety Labels

Your ATV comes with a hang tag and several labels containing important safety information. Anyone who rides the vehicle should read and understand this information before riding.

The labels should be considered permanent parts of the vehicle. If a label comes off or becomes hard to read, contact your Honda dealer for replacements.

Safety Labels

USA only



Safety Labels

WARNING

Improper tire pressure or overloading can cause loss of control.

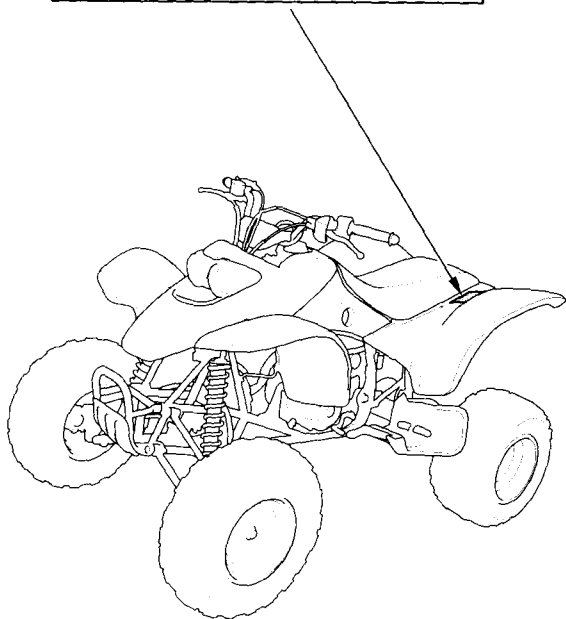
Loss of control can result in severe injury or death.

- Cold tire pressure;

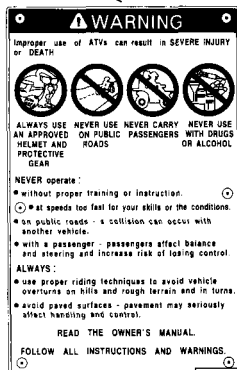
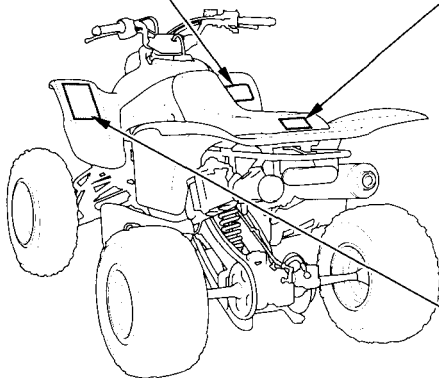
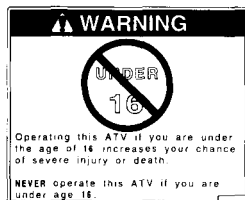
Front: $27 \pm 4 \text{ kPa}$ $0.275 \pm 0.04 \text{ kgf/cm}^2$ $4.0 \pm 0.6 \text{ psi}$

Rear: $27 \pm 4 \text{ kPa}$ $0.275 \pm 0.04 \text{ kgf/cm}^2$ $4.0 \pm 0.6 \text{ psi}$

- Maximum weight capacity; 110kg (243 lbs.)



Safety Labels



Indicators & Controls

This section shows the location of indicators and controls you would normally use before or while riding your ATV.

The items listed on this page are described in this section. Instructions for other components are presented in other sections of this manual where they will be most useful.

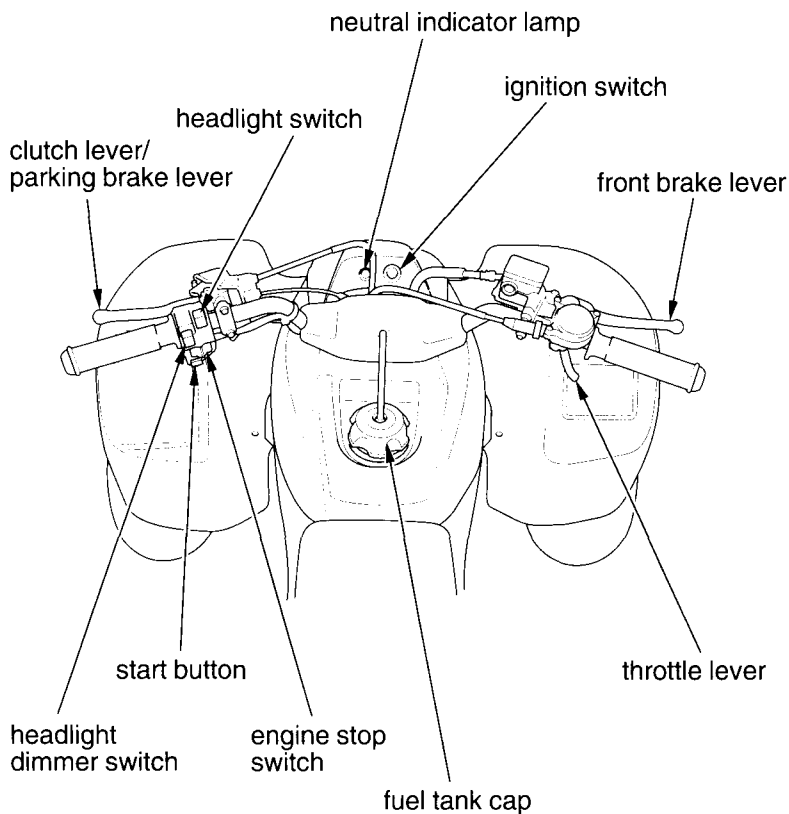
Component Locations	11
Indicators.....	14
Neutral Indicator Lamp	14

Indicators & Controls

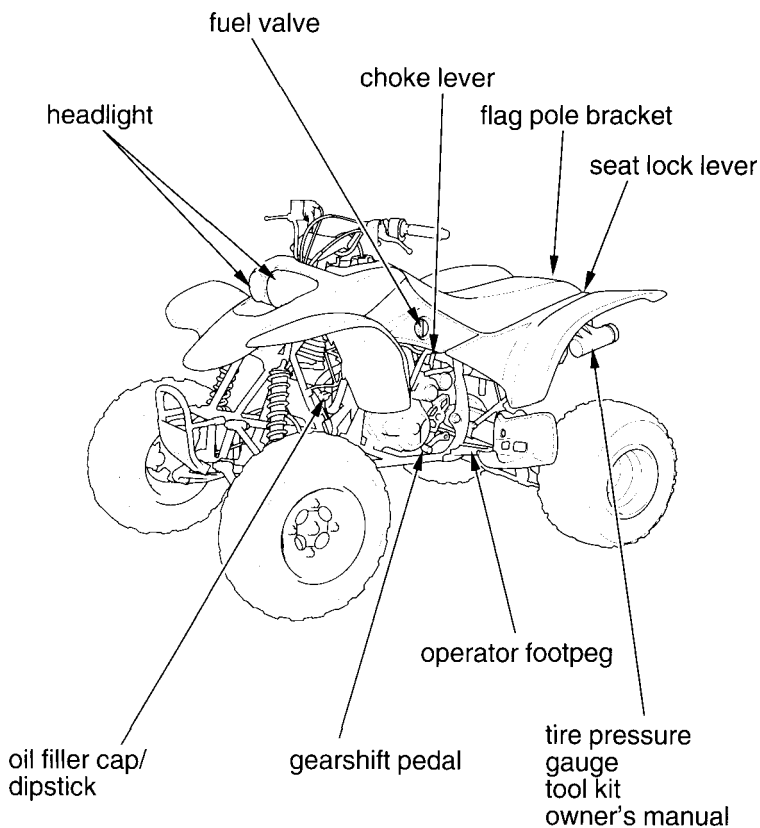
Controls & Features

Fuel Valve	15
Choke Lever.....	16
Ignition Switch.....	17
Start Button	18
Engine Stop Switch.....	18
Headlight Switch.....	19
Headlight Dimmer Switch.....	19
Throttle Lever	20
Clutch Lever.....	20
Front Brake Lever	21
Rear Brake Pedal.....	21
Parking Brake.....	21
Flag Pole Bracket	22

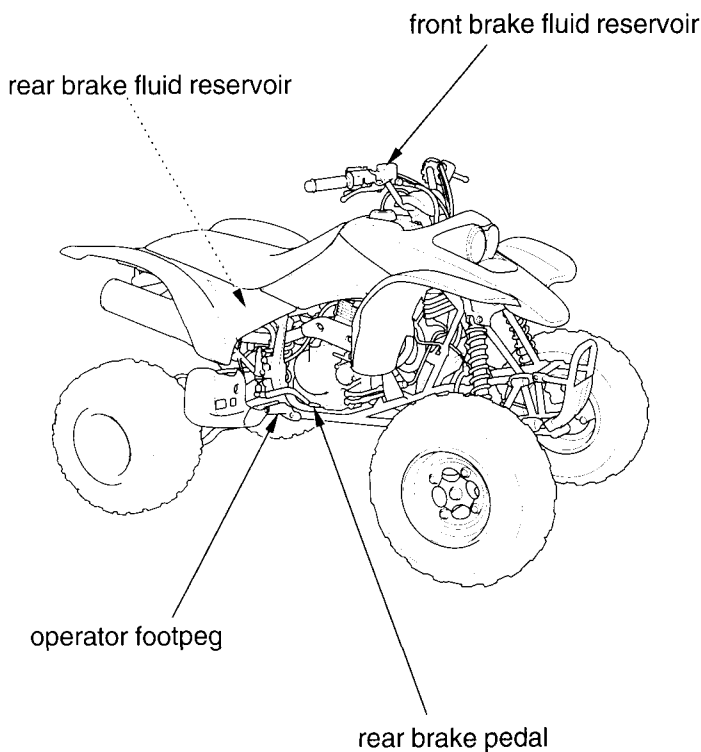
Component Locations



Component Locations



Component Locations



Indicators

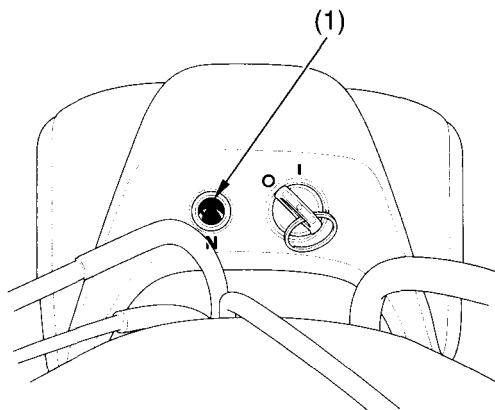
Neutral Indicator Lamp

The neutral indicator lamp (1) is located on the headlight case.

The neutral indicator lamp will light when the transmission is in neutral and the ignition switch is ON (I).

If the indicator does not come on when it should, have your Honda dealer check for burned-out bulb or other problems.

FRONT

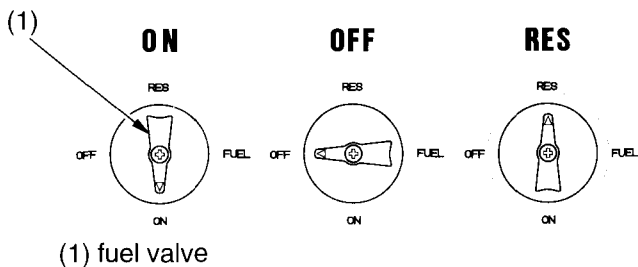


(1) neutral indicator lamp

Controls & Features

Fuel Valve

LEFT SIDE



The manual fuel valve is located on the left side of the fuel tank.

The three-way fuel valve is used to control the flow of fuel from the fuel tank to the carburetor.

ON — normal position for riding.

OFF — for parking, storing, or transportation.

RES — reserve fuel position.

Reserve Fuel

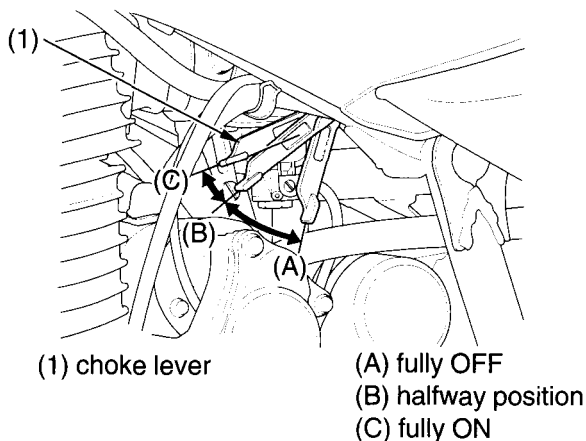
Remember to check that the fuel valve is in the ON position each time you refuel. If the valve is left in the RES position, you may run out of fuel with no reserve.

For complete information about fueling your ATV, see page 83 .

Controls & Features

Choke Lever

LEFT SIDE



The choke lever may be used when starting the engine. See page 44 .

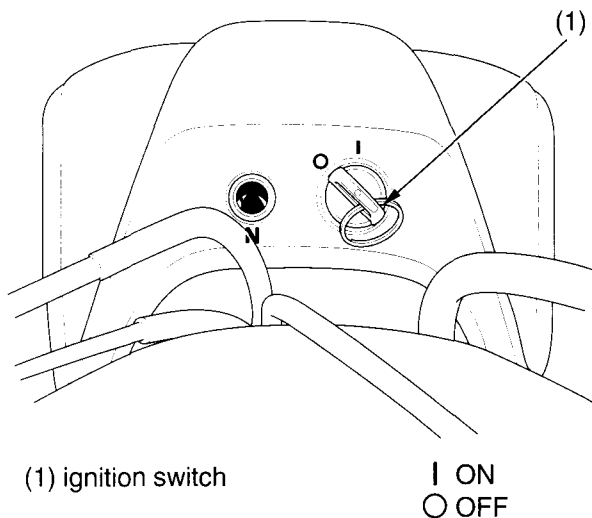
Controls & Features

Ignition Switch

The ignition switch is used for starting and stopping the engine (page 44). Insert the key and turn it to the right for the ON position.

Key Position	Function
ON (I)	Electrical circuits on.
OFF (O)	No electrical circuits function.

HEADLIGHT CASE

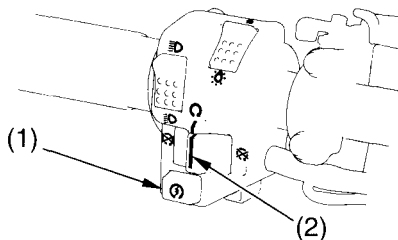


Controls & Features

Start Button



LEFT HANDLEBAR



- (1) start button
- (2) engine stop switch

⚡ START
⊗ OFF
○ RUN

The start button (1) is used for starting the engine. Pushing the button in starts the engine. See *Starting Procedure*, page 46 .

When the start button is pushed, the starter motor will crank the engine. The starter motor will not operate if the engine stop switch is in the OFF position when the start button is pushed.

Engine Stop Switch



The engine stop switch (2) is used to stop the engine in an emergency. To operate, press the switch to either OFF position. The switch must be in the RUN position to start the engine, and it should normally remain in the RUN position even when the engine is OFF.

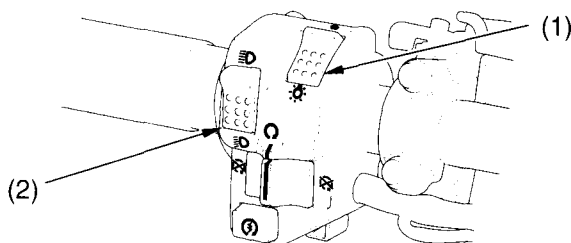
If your ATV is stopped with the ignition switch ON and the engine stop switch OFF, the battery will discharge. Turn the ignition switch OFF to prevent battery discharge.

Controls & Features

Headlight Switch



LEFT HANDLEBAR



(1) headlight switch

(2) headlight dimmer switch

☀ ON
● OFF
≡D HI
≡D LOW

The headlight switch (1) is used to turn the headlight ON (☀) or OFF (●). To operate, turn the switch to ON (☀) or OFF (●).

Headlight Dimmer Switch

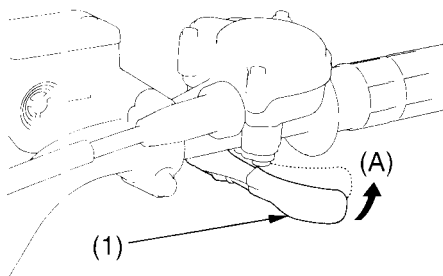


The headlight dimmer switch (2) is used to change between the high and low beams of the headlight. To operate, turn the switch to HI (≡D) for high beam, LO (≡D) for low beam.

Controls & Features

Throttle Lever

RIGHT HANDLEBAR



(1) throttle lever

(A) to open the throttle

The throttle controls engine rpm (speed). To increase engine rpm, press the lever (1) with your thumb. To reduce engine rpm, release pressure on the lever. The throttle will automatically return to the closed position (engine idle) when you remove your thumb.

Clutch Lever

The clutch lever is used to disengage the clutch whenever you shift gears. To operate, pull the clutch lever in all the way before shifting, then slowly release it after shifting. See *clutch system*, page 100.

Controls & Features

Front Brake Lever

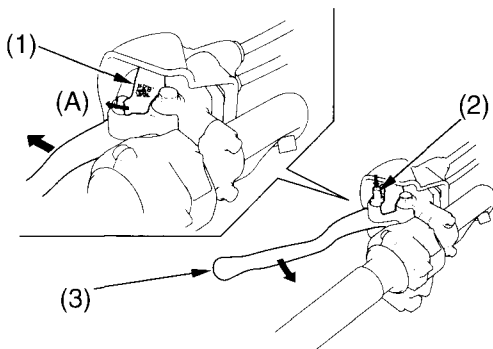
The front brake lever is used to slow or stop your ATV. To operate, pull the lever. For information on braking techniques, see page 52.

Rear Brake Pedal

The rear brake pedal is used to slow or stop your ATV. To operate, depress the pedal. For information on braking techniques, see page 52.

Parking Brake

LEFT HANDLEBAR



(1) lock lever

(2) parking brake pin

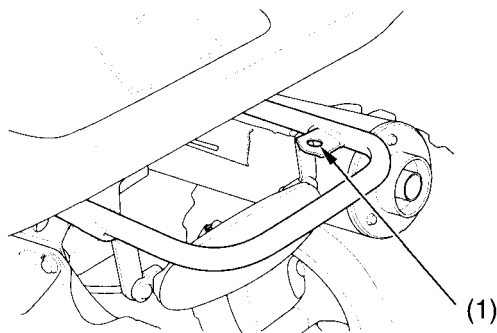
(3) clutch lever/
parking brake lever
(A) to lock

The lock lever (1) and parking brake pin (2) on the clutch/parking brake lever (3) allows it to be used as a parking brake. To operate, push down the parking brake pin (2), squeeze the clutch lever and then lock it with the lock lever. See *Parking* page 66.

Controls & Features

Flag Pole Bracket

RIGHT REAR



(1) flag pole bracket

Flag poles are optional equipment available from your Honda dealer. To mount a pole in the bracket (1), follow the instructions that come with the flag pole kit.

Flag poles are required in some riding areas. Check local regulations before riding.

Before Riding

Before each ride, you need to make sure you and your Honda are both ready to ride. To help get you prepared, this section discusses how to evaluate your riding readiness, what items you should check on your ATV, and adjustments to make for your comfort, convenience, or safety. This section also includes important information about loading.

Are You Ready to Ride ?	24
Protective Apparel.....	24
Rider Training	26
Age Recommendation	27
No Passengers	27
No Alcohol or Drugs.....	28
Is Your ATV Ready to Ride ?.....	29
Pre-ride Inspection	29
Load Limits & Guideline	32
Loading	32
Accessories & Modifications	35

Are You Ready to Ride?

Before you ride your ATV for the first time, we urge you to:

- Read this owner's manual and the labels on your ATV carefully.
- Make sure you understand all the safety messages.
- Know how to operate all the controls.

Before each ride, be sure:

- You feel well and are in good physical and mental condition.
- You are wearing an approved motorcycle helmet (with chin strap tightened securely), eye protection, and other protective clothing.
- You don't have any alcohol or drugs in your system.

Protective Apparel

For your safety, we strongly recommend that you always wear an approved motorcycle helmet, eye protection, boots, gloves, long pants, and a long-sleeved shirt or jacket whenever you ride.

Although complete protection is not possible, wearing proper gear can reduce the chance of injury when you ride.

Following are suggestions to help you choose the proper gear.

Helmets and Eye Protection

Your helmet is your most important piece of riding gear because it offers the best protection against head injuries. A helmet should fit your head comfortably and securely.

Are You Ready to Ride?

An open-face helmet offers some protection, but a full-face helmet offers more. Regardless of the style, look for a DOT (Department of Transportation) sticker in any helmet you buy (USA only). Always wear a face shield or goggles to protect your eyes and help your vision.

WARNING

Operating this ATV without wearing an approved motorcycle helmet, eye protection, and protective clothing could increase your chances of severe injury or death in the event of an accident.

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.

Additional Riding Gear

In addition to a helmet and eye protection, we also recommend:

- Sturdy off-road motorcycle boots to help protect your feet, ankles, and lower legs.
- Off-road motorcycle gloves to help protect your hands.
- Riding pants with knee and hip pads, a riding jersey with padded elbows, and a chest/shoulder protector.

Are You Ready to Ride?

Rider Training

Developing your riding skills is an on-going process. Even if you have ridden other ATVs, take time to become familiar with how this ATV works and handles. Practice riding the ATV in a safe area to build your skills. Do not ride in rough terrain until you get accustomed to the ATV's controls, and feel comfortable with its size and weight.

We urge all riders to take a certified course approved by the ATV Safety Institute (ASI). For information about the ASI training course nearest you, call the national toll-free number; (800) 887-2887 (USA only).

Other riding tips can be found in the *Tips & Practice Guide for the ATV Rider* booklet that came with your ATV (USA only).

WARNING

Operating this ATV without proper instruction could increase your risk of an accident which could lead to serious injury or death.

Beginning and inexperienced operators should complete the certified training course offered by Honda. They should then regularly practice the skills learned in the course and the operating techniques described in the owner's manual.

Are You Ready to Ride?

Age Recommendation

The minimum recommended age for this ATV model is 16. For safety, never let children under 16 years old operate this vehicle.

WARNING

A child using an ATV that is not recommended for their age could lose vehicle control while riding, resulting in severe injury or death.

A child under 16 should never operate an ATV with engine size greater than 90cc.

No Passengers

This ATV is designed as an operator-only vehicle. The long seat is designed to allow the rider to change body position, not for carrying a passenger. Never let a passenger ride on the seat or on the front or rear cargo racks.

WARNING

Carrying a passenger on this ATV greatly reduces your ability to balance and control this ATV and could cause a crash and you or your passenger could be injured or killed.

Never carry a passenger on this ATV.

Are You Ready to Ride?

No Alcohol or Drugs

Alcohol, drugs and ATVs don't mix. Even a small amount of alcohol can impair your ability to operate an ATV safely. Likewise, drugs — even if prescribed by a physician — can be dangerous while operating an ATV. Consult your doctor to be sure it is safe to operate a vehicle after taking medication.

WARNING

Operating this ATV after consuming alcohol or drugs can seriously affect your judgement, cause you to react more slowly, affect your balance and perception, and result in serious injury or death.

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

Is Your ATV Ready to Ride?

Before each ride, it's important to inspect your ATV and make sure any problem you find is corrected. A pre-ride inspection is a must, not only for safety, but because having a breakdown, or even a flat tire, can be a major inconvenience.

If your ATV has overturned or been involved in a collision, do not ride the vehicle until it has been inspected by your Honda dealer. There may be damage or other problems you cannot see.

WARNING

Improperly maintaining this ATV or failing to correct a problem before riding can cause a crash in which you can be seriously hurt or killed.

Always perform a pre-ride inspection before every ride and correct any problems.

Pre-ride Inspection

Check the following items before you get on the ATV:

Engine Oil

Check the level and add oil if needed (page 89).

Check for leaks.

Fuel

Check the level and add fuel (page 84) if needed. Also make sure the fuel fill cap is securely fastened.

Check for leaks.

(cont'd)

Is Your ATV Ready to Ride?

<i>Tires</i>	Use a gauge to check the air pressure. Adjust if needed. Also look for signs of damage or excessive wear (page 128).
<i>Drive Chain</i>	Check the condition and slack. Adjust and lubricate if needed. Also check the chain slider for wear and replace if needed (page 133).
<i>Nuts & Bolts</i>	Check the wheels to see that the axle nuts are tightened. Use a wrench to make sure all accessible nuts, bolts, and fasteners are tight.
<i>Spark Plug & Cap</i>	Check for looseness (page 105).
<i>Underbody & Exhaust System</i>	Check for, and remove, any dirt, vegetation or other debris that could be a fire hazard or interfere with the proper operation of the vehicle.
<i>Air Cleaner Housing Drain Tube</i>	Check for deposits in the drain tube. If necessary, clean the tube (page 97) and check the air cleaner case.
<i>Leaks, Loose Parts</i>	Walk around your ATV and look for anything that appears unusual, such as a leak or loose cable.
<i>Cable</i>	Check the cable housings for wear. Check the fittings for looseness. Replace or tighten as needed.

Is Your ATV Ready to Ride?

Check these items after you get on the ATV:

<i>Throttle</i>	Check the freeplay and adjust if needed. Press the throttle to make sure it moves smoothly without sticking, and snaps shut automatically when it is released, in all steering positions (page 98).
<i>Brakes</i>	Squeeze the front brake lever and step on the rear brake pedal to check that the controls operate normally. Check for proper freeplay. Make sure there is no brake fluid leakage (page 117).
<i>Clutch Lever</i>	Check for smooth operation and adjust if needed (page 100).
<i>Headlight and Headlight Dimmer Switch</i>	Check for proper function (page 19).
<i>Engine Stop Switch</i>	Check for proper function (page 18).
<i>Steering</i>	Check that the wheels turn properly as you steer the handlebar.

Remember, be sure to take care of any problem you find, or have your Honda dealer correct it before you ride.

Load Limits & Guidelines

Your Honda was designed as a rider-only ATV. It was not designed to carry a passenger or cargo. A passenger or cargo could interfere with your ability to move around to maintain your balance and control of the ATV.

In addition, exceeding the weight limits or carrying an unbalanced load can seriously affect your ATV's handling, braking, and stability. Adding accessories or making modifications that change this ATV's design and performance can also make it unsafe. Also, the weight of any accessories will reduce the maximum load the ATV can carry.

More specific information on load limits, accessories, and modifications follows.

Loading

How much weight you put on your ATV, and how you load it, are important to your safety. If you decide to carry cargo, you should be aware of the following information.

⚠ WARNING

Overloading, improper loading, or carrying a passenger can cause a crash and you can be seriously hurt or killed.

Follow all load limits and other loading guidelines in this manual.

Load Limits & Guidelines

Load Limits

Following are the load limits for your ATV:

There are limits to how much weight can be carried on your ATV.

The following load limits apply to standard equipment only. Modifying your ATV, using non-standard equipment, or riding on terrain that is not flat and smooth could further reduce these limits.

maximum weight capacity 243 lbs (110 kg)
(includes the weight of the rider, all cargo, and accessories.)

The weight of added accessories will reduce the maximum cargo weight you can carry.

Load Limits & Guidelines

Loading Guidelines

As discussed on page 32 , we recommend that you do not carry any cargo on this ATV. However, if you decide to carry cargo, ride at reduced speeds and follow these common-sense guidelines.

Carrying cargo or pulling a trailer will affect how your ATV handles and greatly reduce its ability in accelerating, braking and making turns and other maneuvers.

Be sure to observe the weight limits and follow these guidelines:

- Check that the tires are properly inflated.
- Never ride with a passenger. The ATV is not designed to carry a passenger.
- Do not tow another vehicle.
- Never exceed the maximum weight limit.
- Make sure all cargo is secured before riding.
- Allow extra room for starting, stopping and turning whenever you carry cargo or pull a trailer.
- Avoid riding on steep slopes when carrying cargo or pulling a trailer.
- Never cross a slope when towing a trailer.

Accessories & Modifications

Modifying your ATV or using non-Honda accessories can make your ATV unsafe.

Before you consider making any modifications or adding an accessory, be sure to read the following information.

WARNING

Improper accessories or modifications can cause a crash in which you can be seriously hurt or killed.

Follow all instructions in this owner's manual regarding accessories and modifications.

Accessories

We strongly recommend that you use only genuine Honda accessories that have been specifically designed and tested for your ATV. Because Honda cannot test all other accessories, you must be personally responsible for proper selection, installation, and use of non-Honda accessories.

Check with your Honda dealer for assistance and always follow these guidelines:

- Make sure the accessory does not obscure any lights, reduce ground clearance, limit suspension travel or steering travel, or interfere with operating any controls.
- Make sure the accessory does not interfere with your ability to shift body position on the seat or operate hand and foot controls.
- Do not add any electrical equipment that will exceed the vehicle's electrical system capacity (page 178). A blown fuse can cause a loss of lights or engine power (page 168).

Accessories & Modifications

Modifications

We strongly advise you not to remove any original equipment or modify your ATV in any way that would change its design or operation. Such changes could seriously impair your ATV's handling, stability, and braking, making it unsafe to ride.

We also advise you not to make any modifications or remove any equipment (such as the USDA qualified spark arrester or emission control system components) that would make your ATV illegal in your area.

Removing or modifying your lights, exhaust system, emission control system, or other equipment can also make your ATV illegal.

Basic Operation & Riding

This section gives basic riding instructions, including how to start and stop your engine, and how to use the throttle and brakes. and what to do when you're through riding.

To protect your new engine and enjoy optimum performance and service life, refer to Break-in Guidelines (page 180).

For information about carburetor adjustment for riding at high altitude, see page 181.

Safe Riding Precautions	39
Off-Road Use Only	39
Keeps Hands and Feet on Controls	40
Control Speed	41
Use Care on Unfamiliar or Rough Terrain	42
Do Not Perform Stunts	43
Starting & Stopping the Engine	44
Preparation	45
Starting Procedure	46
Flooded Engine	49
How to Stop the Engine	49
Shifting Gears	50

(cont'd)

Basic Operation & Riding

Braking.....	52
Riding Your ATV	54
Making Turns.....	54
Skidding or Sliding	56
Riding Up Hills	57
Riding Down Hills	61
Crossing or Turning on Hills or Slopes.....	62
Riding Over Obstacles	64
Riding Through Water	65
Parking	66

Safe Riding Precautions

Before riding your ATV for the first time, please review the *ATV Safety* section beginning on page 1, and the *Before Riding* section beginning on page 23.

Even if you have ridden other ATVs, take time to become familiar with how this ATV works and handles. Practice in a safe area until you build your skills and get accustomed to the ATV's size and weight.

Off-Road Use Only

Your ATV and its tires are designed and manufactured for off-road use only, not for pavement. Riding on pavement can affect handling and control. You should not ride your ATV on pavement.

WARNING

Operating this ATV on paved surfaces may seriously affect handling and control of the ATV, and may cause the vehicle to go out of control.

Never operate the ATV on any paved surfaces, including sidewalks, driveways, parking lots and streets.

When riding off-road, also remember to always obey local off-road riding laws and regulations. Obtain permission to ride on private property. Avoid posted areas and obey “no trespassing” signs.

(cont'd)

Safe Riding Precautions

You should never ride your ATV on public streets, roads or highways, even if they are not paved. Drivers of street vehicles may have difficulty seeing and avoiding you, which could lead to a collision. In many states it is illegal to operate ATVs on public streets, roads and highways.

WARNING

Operating this ATV on public streets, roads or highways could cause you to collide with another vehicle.

Never operate this ATV on any public street, road or highway, even a dirt or gravel one.

Keep Hands and Feet on Controls

Always keep both hands on the handlebars and both feet on the footpegs when riding your ATV. This is important to maintain your balance and to control the vehicle. Removing even one hand from the handlebars or one foot from the footpegs can reduce your ability to control the ATV or could cause you to lose your balance and fall off the ATV.

WARNING

Removing hands from handlebars or feet from footpegs during operation can reduce your ability to control the ATV or could cause you to lose your balance and fall off of the ATV.

Always keep both hands on the handlebars and both feet on the footpegs of your ATV during operation.

Safe Riding Precautions

Control Speed

Riding at excessive speed increases the chance of an accident. In choosing a proper speed, you need to consider the capability of your vehicle, the terrain, visibility and other operating conditions, plus your own skills and experience.

WARNING

Operating this ATV at excessive speeds increases your chances of losing control of the ATV, which can result in an accident.

Always go at a speed that is proper for your vehicle, the terrain, visibility and other operating conditions, and your experience.

Safe Riding Precautions

Use Care on Unfamiliar or Rough Terrain

Before riding in a new area, always check the terrain thoroughly. Don't ride fast on unfamiliar terrain or when visibility is limited. (It's sometimes difficult to see obstructions like hidden rocks, bumps, or holes in time to react.)

WARNING

Failure to use extra care when operating this ATV on unfamiliar terrain could result in the ATV overturning or going out of control.

Go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the ATV.

Safe Riding Precautions

Never ride past the limit of visibility. Maintain a safe distance between your ATV and other off-road vehicles. Always exercise caution, and use extra care on rough, slippery and loose terrain.

WARNING

Failure to use extra care when operating on excessively rough, slippery or loose terrain could cause loss of traction or vehicle control, which could result in an accident, including an overturn.

Do not 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.

Do Not Perform Stunts

You should always operate your ATV in a safe and reasonable manner. When riding, always keep all four wheels on the ground.

WARNING

Attempting wheelies, jumps, and other stunts increases the chance of an accident, including an overturn.

Never attempt stunts, such as wheelies or jumps. Don't try to show off.

Starting & Stopping the Engine

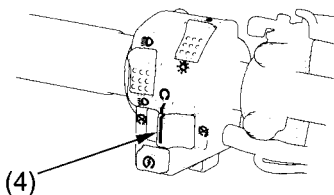
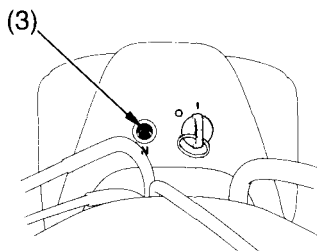
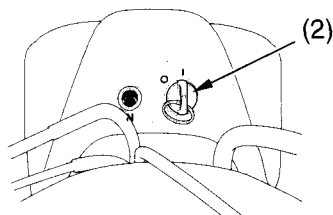
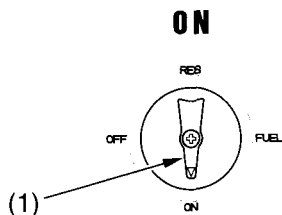
Always follow the proper starting procedure described below.

For your safety, avoid starting or operating the engine in an enclosed area such as a garage. Your ATV's exhaust contains poisonous carbon monoxide gas which can collect rapidly in an enclosed area and cause illness or death.

Your ATV is equipped with a gear position starter cut-off system. The engine cannot be started if the transmission is in a forward gear—unless the clutch lever is pulled in.

Starting & Stopping the Engine

Preparation



(1) fuel valve
(2) ignition switch

(3) neutral indicator
(4) engine stop switch

1. Before starting, Select a level surface and lock the parking brake (page 21).
2. Turn the fuel valve (1) and ignition switch (2) to ON (|).

Confirm the following:

- The transmission is in NEUTRAL (neutral indicator (3) light ON).
- The engine stop switch (4) is set to RUN (○).

Starting & Stopping the Engine

Starting Procedure

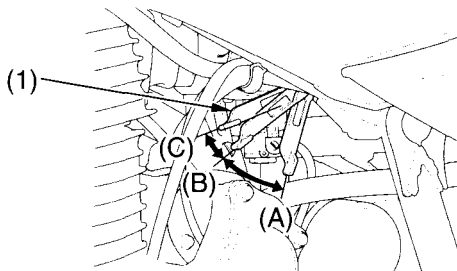
The carburetor is equipped with an accelerator pump. Do not open the throttle when starting the engine. This will flood the engine with excess fuel, resulting in hard starting.

To restart a warm engine, follow the procedure for “*High Air Temperature.*”

The starter motor will operate only when the transmission is in neutral.

Normal Air Temperature 10° – 35°C (50° – 95°F)

LEFT SIDE



(1) choke lever

(A) fully OFF

(B) halfway position

(C) fully ON

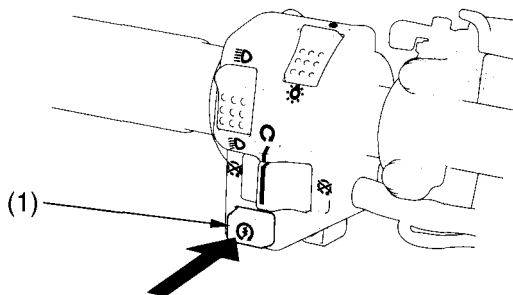
1. If the engine is cold, Move the choke lever (1) left to the fully ON (C) position.
 2. With the throttle slightly open, press the start button.
- Pressing the electric start button for more than 5 seconds at a time may cause the starter to overheat and damage the starter. Release the start button for approximately 10 seconds before pressing it again.

Starting & Stopping the Engine

3. Immediately after the engine starts, push the choke lever down to the halfway position (B).
4. Warm up the engine by opening and closing the throttle slightly.
5. After the engine has warmed up, push the choke lever down all the way to fully OFF (A).
6. If idling is unstable, open the throttle slightly.

High Air Temperature 35°C (95°F) or above

LEFT HANDLEBAR



(1) start button

1. Do not use the choke.
2. With the throttle slightly open, press the start button (1).

Starting & Stopping the Engine

Low Air Temperature 10°C (50°F) or below

1. Follow steps 1 – 2 under “*Normal Air Temperature.*”

If the engine does not start after several attempts, operate the start button after opening and closing the throttle lever several times.

2. Warm up the engine by opening and closing the throttle slightly.
3. When the engine begins to run slightly rough, push the choke lever down to the halfway position (B).
4. Continue warming up the engine until it runs smoothly and responds to the throttle, then push the choke lever down all the way to fully OFF (A).
5. If idling is unstable, open the throttle slightly.

NOTICE

Extended use of the choke may impair piston and cylinder wall lubrication and shorten the life of the engine.

Do not race the engine during the warm-up period.

Racing a cold engine wastes fuel and increases engine wear.

Starting & Stopping the Engine

Flooded Engine

If the engine fails to start after repeated attempts, it may be flooded with excess fuel. To clear a flooded engine:

1. Move the engine stop switch to OFF (⌫).
2. Move the choke lever to the fully OFF position.
3. Open the throttle fully.
4. Press the start button for 5 seconds.
5. Wait 10 seconds, then turn the engine stop switch to RUN (○).
6. Repeat the *Normal Air Temperature* starting procedure, but don't use the choke.

If the engine still won't start, refer to *If Your Engine Quits or Won't Start*, page 162 .

How to Stop the Engine

Normal Engine Stop

To stop the engine, make sure the transmission is in neutral by checking that the neutral indicator lights, and turn the ignition switch OFF.

The engine stop switch should normally remain in the RUN (○) position even when the engine is OFF.

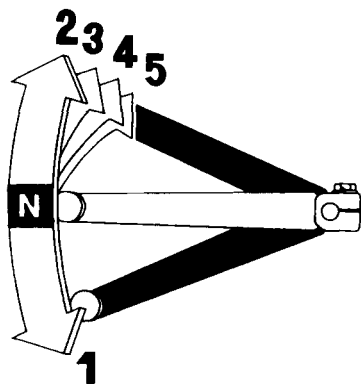
If your ATV is stopped with the engine stop switch OFF (⌫) and the ignition switch ON, the battery will discharge.

Emergency Engine Stop

To stop the engine in an emergency, use the engine stop switch. To operate, move the switch to either OFF position.

Shifting Gears

GEAR SHIFTING SEQUENCE



The gearshift pedal is located near the left footpeg. One full stroke of the pedal shifts the transmission to the next higher or lower gear in the shifting sequence. The pedal automatically returns to the horizontal position when released.

Your ATV has five forward gears (1, 2, 3, 4 and 5). To shift the transmission, pull in the clutch lever, then operate the gearshift pedal as follows.

To upshift to a higher gear, put the toe of your boot under the gearshift pedal and raise the pedal one full stroke. To downshift, step on the gearshift pedal and depress the pedal one full stroke.

Shifting Gears

After starting the engine and letting it warm up, follow these procedures:

1. Depress and hold down the brake pedal. Release the parking brake (page 21).
2. While the engine is idling, pull in the clutch lever and depress the gearshift pedal to shift into 1st (first) gear.
3. Release the brake pedal, gradually release the clutch lever, and increase engine speed by gradually opening the throttle.
4. When the speed increases, close the throttle, pull in the clutch lever, and shift to 2nd gear by raising the gearshift pedal.
5. Repeat this sequence to progressively upshift to 3rd, 4th and 5th (top) gear.
6. To downshift, reverse this sequence. Remember to close the throttle each time you shift to the next lower gear.

Learning when to shift gears comes with experience. Keep the following tips in mind:

- As a general rule, shift while moving in a straight line.
- Close the throttle and pull the clutch lever in completely before shifting. Improper shifting may damage the engine, transmission, and drive train.
- Upshift to a higher gear or reduce throttle before engine rpm (speed) gets too high. Learn the relationship between engine sound and the normal shifting points.
- Downshift to a lower gear before you feel the engine laboring (lugging) at low rpm.
- Avoid downshifting to help slow your ATV when engine rpm is high. Downshifting when engine speed is near its allowable maximum may over-rev the engine and cause possible damage.
- To prevent transmission damage, do not coast or tow the ATV for long distances with the engine off.
- Ride in the highest gear that lets the engine run and accelerate smoothly. This will give you good fuel economy and effective emissions control.

Braking

Your ATV is equipped with disc braking systems which are hydraulically activated. Depressing the brake pedal applies the rear disc brake. Operating the brake lever applies the front disc brake.

As a general rule, the front braking system provides about 70 percent of total stopping power.

For full braking effectiveness, use both the pedal and lever simultaneously. Using both braking systems will stop your ATV faster with greater stability.

To slow or stop, apply the brake lever and brake pedal smoothly, while downshifting to match your speed.

Gradually increase braking as you feel the brakes slowing your speed. The increase in engine compression from downshifting will help slow your ATV.

For maximum braking, close the throttle and firmly apply the brake lever and pedal controls.

Applying the brakes too hard may cause the wheels to lock and slide, reducing control of your ATV. If this happens, release the brake controls, steer straight ahead until you regain control, then reapply the brakes more gently.

When possible, reduce your speed or complete braking before entering a turn. Avoid braking or closing the throttle quickly while turning. Either action may cause one or more wheels to slip and reduce your control of your ATV.

Your ability to brake in a turn and to brake hard in an emergency situation are important riding skills.

When descending a long, steep grade, use engine compression braking by downshifting, with intermittent use of both brakes. Continuous brake application can overheat the brakes and reduce their effectiveness.

To prevent stalling the engine, pull the clutch lever in before coming to a complete stop.

Riding with your foot resting on the brake pedal or your hand on the brake lever may overheat the brakes, reducing effectiveness.

For information on how to apply the brakes in various riding situations, see the following section, *Riding Your ATV*.

Riding Your ATV

Making Turns

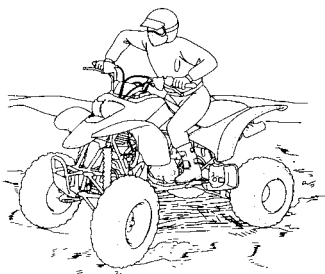
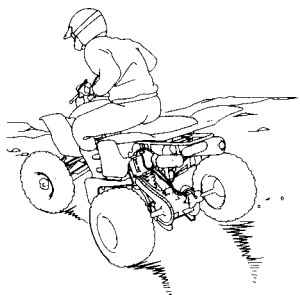
Learn how to turn your ATV properly. Practice the techniques outlined in this section on level ground and at low speeds until you are confident in making turns.

WARNING

Turning improperly can make the ATV to go out of control, causing a collision or overturn.

- Always follow proper procedures for turning as described in this owner's manual.
- Practice turning at low speeds before attempting to turn at faster speeds.
- Do not turn at excessive speeds.

Riding Your ATV



Lean your body to the inside of a turn and forward.

To make a turn on level ground: Steer the handlebar and lean your body toward the inside of the turn. Leaning helps balance the vehicle, and it feels more comfortable. Leaning into a turn is an important technique to master in riding an ATV.

To make a sharp turn at low speed: It helps to shift your body slightly forward on the seat, and lean inside, as you steer the handlebar. Shifting weight forward allows the rear wheels to turn easier, and it also improves front-wheel steering.

To make a turn from a full stop: Apply the throttle gradually when you turn and start up at the same time. Remember to shift your body forward to make sharp low-speed turns and whenever you turn while accelerating from a full stop.

Riding Your ATV

Skidding or Sliding

The terrain surface can be a major factor affecting turns. Skidding during a turn is more likely to occur on slippery surfaces, such as snow, ice, mud and loose gravel. If you skid on ice, you may lose all directional control. To avoid skidding on slippery terrain, keep your speed low and ride with caution.

WARNING

Skidding or sliding improperly may cause you to lose control of this ATV. You may also regain traction unexpectedly, which may cause the ATV to overturn.

Learn to safely control skidding by practicing at low speeds and on level, smooth terrain.

If your ATV skids sideways during a turn, steer in the direction of the skid. Avoid hard braking or accelerating until you have regained directional control.

Riding Your ATV

Riding Up Hills

The ATV's ability to safely climb hills largely depends on the rider's skill and judgment. Begin by practicing on smooth, gentle slopes. As you gain experience, you'll learn the hazards and your own limitations. You may then proceed to ride on more difficult terrain. However, you must be able to decide which hills or hazards might cause the ATV to overturn. Avoid excessively steep hills.

WARNING

Operating on excessively steep hills can cause the vehicle to overturn more easily than operating on level surfaces or small hills.

Never operate the ATV on hills too steep for the ATV or for your abilities.

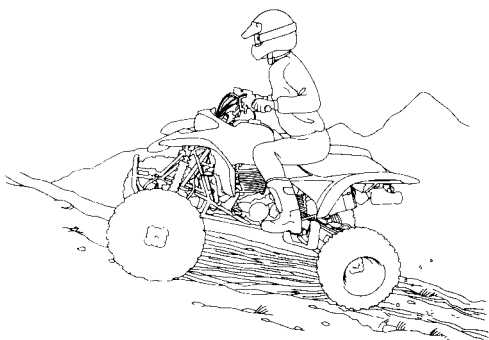
When climbing hills, you must shift weight toward the front wheels to help keep them on the ground. To do this, shift your body slightly forward on the seat and lean forward. For greater weight shift, move your body farther forward and lean forward.

WARNING

Climbing hills improperly could cause loss of control or cause the ATV to overturn.

Always follow proper procedures for climbing hills as described in this owner's manual.

Riding Your ATV



Shift weight forward when climbing hills.

- Always check the terrain carefully before you start up any hill.
- Never climb hills with excessively slippery or loose surfaces.
- To climb a hill, take a running start in an appropriate gear and speed for the conditions. Maintain a steady speed as you ascend the hill.
- Never open the throttle suddenly or make sudden gear changes. The ATV could flip over backward.
- Never go over the top of any hill at high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.

Riding Your ATV

Stalling the ATV and/or Rolling Backwards:

If you incorrectly estimate climbing capability or terrain conditions, the ATV may not have enough power or traction to continue uphill. If this happens, the ATV can stall and/or roll backwards.

WARNING

Stalling, rolling backwards or improperly dismounting while climbing a hill could result in the ATV overturning.

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

What to do if the ATV stalls or rolls backwards when climbing a hill:

If you are about to lose all forward speed:

1. Using the front and rear brakes together, bring the ATV to a stop with the vehicle pointed straight uphill.
2. Get off the ATV while you continue holding the brakes.
3. Shift into neutral, set the parking brake and turn the engine off.
4. Then assess the situation.

If the ATV starts rolling backwards before you begin braking:

1. Keep your weight uphill.
2. Carefully apply the front brakes first, then carefully apply the rear brake. Do not apply the rear brake only or abruptly if you are rolling backwards, or the vehicle may overturn.

If the ATV continues sliding backwards:

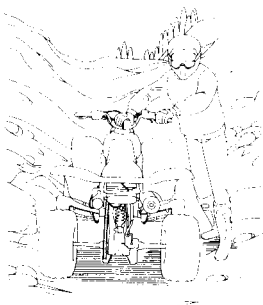
After you've applied the brakes, get off and away from the vehicle.

Riding Your ATV

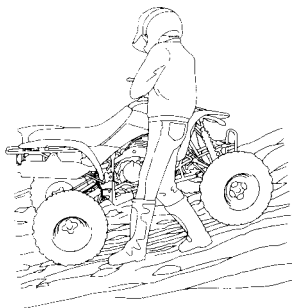
What to do after the ATV has stalled or rolled backwards:

If the hill is too steep or too slippery, or if you have any doubt whether you can safely walk the ATV back down the hill, leave the vehicle where it is and get help. If possible, block the wheels so the vehicle doesn't roll backwards.

If the hill is not too steep and you have good footing, you may be able to walk the ATV back down the hill. Make sure your intended path is clear in case you lose control of the ATV.



Be sure your legs are clear of the wheels.



Body position for backing down a hill.

1. Stand with your body facing downhill, beside the vehicle so you can reach the front brake lever with your left hand.
2. Be sure your legs are clear of the wheels.
Check your footing.
3. Slowly and carefully back the ATV down the hill using the front brake lever to control speed.
4. If you lose control of the ATV, for your safety, get away from the vehicle.

Riding Your ATV

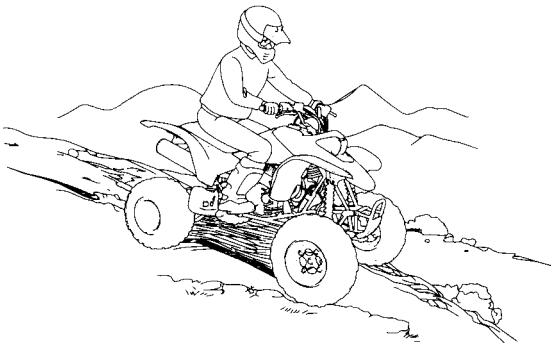
Riding Down Hills

It's usually advisable to descend hills with the ATV pointed straight downhill. Avoid angles that would cause the vehicle to lean sharply to one side.

WARNING

Going down a hill improperly could cause loss of control or cause the ATV to overturn.

Always follow proper procedures for going down hills as described in this owner's manual.



On downhills, shift your weight back.

As you approach a downhill, stop and survey the terrain below. Never ride past the limit of your visibility. Never go down a hill at high speed.

Riding Your ATV

When you've selected a safe downhill path, shift into a lower gear, shift your weight back with your arms extended and braced against the handlebar, then go down slowly with the throttle closed.

Use mainly the rear brake to control speed. Avoid using the front brake hard or abruptly when riding down hills.

Remember, braking effectiveness is reduced on any hill with a loose surface.

Crossing or Turning on Hills or Slopes

Riding on hills or slopes is different from riding on level terrain. Be careful when riding on any hill. Make sure that you practice on gentle, smooth slopes before attempting to ride on steeper or more difficult terrain.

WARNING

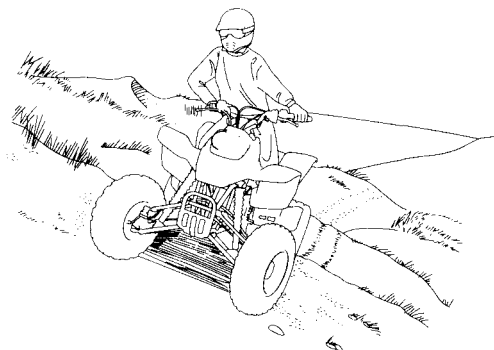
Improperly crossing hills or turning on hills could cause loss of control or cause the ATV to overturn.

Always follow proper procedures for crossing or turning on slopes as described in this Owner's Manual. Avoid crossing steep hills if possible.

Riding Your ATV

Crossing Hills or Slopes

- To maintain balance and stability when riding across a slope, you need to shift weight toward the uphill side of the vehicle. To do this, move your body off the center of the seat and lean toward the uphill side.
- On a slippery or loose surface, you may also need to steer slightly uphill to maintain a straight course across the slope.
- Avoid crossing hills that are excessively steep, slippery or rough.



Shift weight uphill when crossing slopes.

Making Turns on Slopes

- Compared to riding on level ground, you may need to shift more weight and lean more when making turns on slopes.
- Do not make turns on any slopes until you have first mastered the techniques for making turns on level terrain.

Riding Your ATV

Riding Over Obstacles

Before operating in a new area, check for obstacles. Watch out for bumps, rain ruts, potholes and other obstacles in the terrain. When you approach any obstacle, reduce your speed and be prepared to stop. Never try to ride over large obstacles, such as large rocks or fallen logs.

WARNING

Improperly operating over obstacles could cause loss of control or a collision and could cause the ATV to overturn.

When you go over obstacles, always follow proper procedures as described in this owner's manual.

Riding Your ATV

Riding Through Water

Your ATV is designed to travel through water up to approximately 10 inches deep. Before crossing a stream, make sure the water is not too deep or flowing too fast.

WARNING

The ATV tires have some ability to float. Operating this ATV through deep or fast-flowing water may cause a loss of traction and loss of control, which could lead to an accident.

Never operate this ATV in fast-flowing water or in water deeper than that specified in this Owner's Manual.

1. Choose a path where both banks have gradual slopes.
2. Proceed through the water at a slow, steady speed.
3. Watch out for submerged obstacles and slippery rocks.
4. Avoid getting the spark plug or air cleaner wet, as this would cause the engine to stop.
5. After leaving the water, always test both the front and rear brakes.
 - Riding through water can make the brakes less effective than normal, and may reduce stopping ability.
 - If necessary, apply the brakes repeatedly until they dry out and operate normally.

Parking

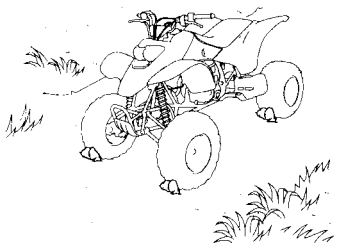
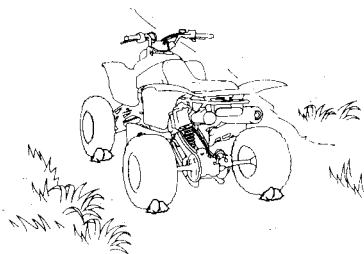
1. Look for level parking area. Make sure the ground surface is firm.
2. After bringing your ATV to a stop, hold the brakes while you shift into neutral.
3. Set the parking brake.
4. Turn the ignition switch OFF (O).
5. If you're through riding for the day, turn the fuel valve OFF.

If it is necessary to start the engine when your ATV is stopped on a grade in gear, rock the vehicle back and forth to allow shifting the transmission into neutral.

Parking on a steep Incline or a Loose or Slippery Surface

If you must park your ATV on a steep incline or loose or slippery surface, use the following procedure:

1. While holding the brakes, set the parking brake.
2. Turn the ignition switch OFF (O) and release the brakes.
3. If the ATV begins to move, either while sitting on it or after you dismount, find a better parking location.
4. If rocks or other objects are available, you can block the wheels as shown for additional security.



Servicing Your Honda

To help keep your ATV in good shape, this section includes a Maintenance Schedule for required service and step-by-step instructions for specific maintenance tasks. You'll also find important safety precautions, information on fuels and oils, and tips for keeping your Honda looking good.

For information about replacing fuse, see page 168.

Before You Service Your Honda

The Importance of Maintenance	69
Maintenance Safety.....	70
Important Safety Precautions	71
Maintenance Schedule	72
Maintenance Record.....	76

Service Preparations

Component Locations	77
Tool Kit.....	80
Owner's Manual Storage.....	81
Seat Removal	82

Servicing Your Honda

Service Procedures

Fluids & Filters

Fuel	83
Engine Oil & Filter.....	86
Air Cleaner	94

Engine

Throttle Lever	98
Clutch System	100
Engine Idle Speed	104
Spark Plug	105
Valves.....	108
Spark Arrester	109

Chassis

Suspension	111
Brakes.....	117
Tires	125
Engine Guard & Skid Plates.....	132
Drive Chain	133

Electrical

Battery	139
Appearance Care	144

The Importance of Maintenance

A well-maintained ATV is essential for safe, economical, and trouble-free riding. It will also help reduce air pollution. Careful pre-ride inspections and good maintenance are especially important because your ATV is designed to be ridden over rough off-road terrain.

To help your properly care for your ATV, this section of the manual provides a Maintenance Schedule. The service intervals in this schedule are based on average riding conditions.

More frequent service is needed if you subject your ATV to severe use or ride in unusually wet or dusty areas.

WARNING

Improperly maintaining this ATV or failing to correct a problem before you ride can cause a crash in which you can be seriously hurt or killed.

Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

Frequent servicing of the air cleaner is especially important to help you avoid a possible costly engine repair.

If your ATV overturns or is involved in a crash, be sure your Honda dealer inspects all major parts, even if you are able to make some repairs.

Maintenance Safety

This section includes instructions on how to perform some important maintenance tasks. If you have basic mechanical skills, you can perform many of these tasks with the tools provided with your ATV.

Other tasks that are more difficult and require special tools are best performed by professionals. Removing the wheels should normally be handled only by a Honda technician or other qualified mechanic. Instructions are included in this manual only to assist in emergency service.

Some of the most important safety precautions follow. However, we cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.

WARNING

Failure to properly follow maintenance instructions and precautions can cause you to be seriously hurt or killed.

Always follow the procedures and precautions in this owner's manual.

Maintenance Safety

Important Safety Precautions

- Make sure the engine is off before you begin any maintenance or repairs. This will help eliminate several potential hazards:
Carbon monoxide poisoning from engine exhaust. Be sure there is adequate ventilation whenever you operate the engine.
Burns from hot ATV parts. Let the engine and exhaust system cool before touching.
Injury from moving parts. Do not run the engine unless instructed to do so.
- Read the instructions before you begin, and make sure you have the tools and skills required.
- To reduce the possibility of a fire or explosion, be careful when working around gasoline. Use only non-flammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.

Remember that your Honda dealer knows your ATV best and is fully equipped to maintain and repair it. To ensure the best quality and reliability, use only new genuine Honda parts or other equivalents for repair and replacement. If you have the tools and skills required for additional maintenance jobs, you can purchase an official Honda Service Manual (page 188).

Maintenance Schedule

The required Maintenance Schedule that follows specifies how often you should have your ATV serviced, and what things need attention. It is essential to have your ATV serviced as scheduled to maintain safe, dependable performance and proper emission control.

The service intervals in this Maintenance Schedule are based on average riding conditions. Some items will need more frequent service if you ride in unusually wet or dusty areas or at full throttle. Consult your Honda dealer for recommendations applicable to your individual needs and use.

Some items in the Maintenance Schedule can be performed with basic mechanical skills and hand tools. Procedures for these items are provided in this manual. Other items involve more extensive procedures and may require special training, tools, and equipment. We recommend that you have your Honda dealer perform these tasks unless you have advanced mechanical skills and the required tools and equipment. Procedures for such items in this schedule are provided in an official Honda Service Manual available for purchase (page 188).

If you do not feel capable of performing a given task or need assistance, remember that your Honda dealer knows your ATV best and is fully equipped to maintain and repair it. If you decide to do your own maintenance, use only genuine Honda parts or their equivalents for repair or replacement to ensure the best quality and reliability.

Maintenance Schedule

Perform the pre-ride inspection (page 29) and owner maintenance on this section at each scheduled maintenance period.

Each item on the maintenance schedule requires some mechanical knowledge. Certain items (particularly those marked * and **) may require more technical information and tools. Consult your Honda dealer.

- * Should be serviced by your Honda dealer, unless you have the proper tools and service data and are mechanically qualified. Refer to the official Honda Service Manual (page 188).
- ** In the interest of safety, we recommend these items be serviced only by your Honda dealer.

Summary of Maintenance Schedule Notes & Procedures:

NOTES:

1. Service more frequently when riding in dusty areas, sand or snow.
2. Service more frequently after riding in very wet or muddy conditions.
3. Replace every 2 years. Replacement requires mechanical skill.

Maintenance Schedule

Maintenance Procedures:

I: inspect and clean, adjust, lubricate, or replace, if necessary

C: clean

A: adjust

L: lubricate

R: replace

ITEMS		FREQUENCY	WHICHEVER COMES FIRST		INITIAL MAINT.	REGULAR MAINT. INTERVAL		Refer to page
			FIRST ⇒	mi	100	600	1200	
				km	150	1000	2000	
			NOTE	HOURS	20	100	200	
EMISSION RELATED ITEMS	*	FUEL LINE					I	—
	*	THROTTLE OPERATION					I	98
		AIR CLEANER				C	C	95
		AIR CLEANER HOUSING DRAIN TUBE	NOTE 1			I	I	97
		SPARK PLUG	NOTE 2			I	I	105
	*	VALVE CLEARANCE			I	I	I	108
		ENGINE OIL			R	R	R	87
		ENGINE OIL FILTER			R	R	R	91
	*	ENGINE OIL STRAINER SCREEN IN OIL TANK					C	—
	*	ENGINE IDLE SPEED			I	I	I	104

- * Should be serviced by your Honda dealer, unless you have the proper tools and service data and are mechanically qualified. Refer to the official Honda Service Manual (page 188).

Maintenance Schedule

ITEMS			FREQUENCY	WHICHEVER COMES FIRST ⇒ NOTE	HOURS	INITIAL	REGULAR		Refer to page	
						MAINT.	MAINT. INTERVAL			
							mi	600		1200
							km	150		1000
						20	100	200		
NON EMISSION RELATED ITEMS		DRIVE CHAIN	NOTE 1,2			I, L	(I, LEVERY 300mi (500km) or 50 operating hours)		133	
		DRIVE CHAIN SLIDER					I	I	133	
	*	BRAKE FLUID	NOTE 3				I	I	117	
	*	BRAKE PAD WEAR	NOTE 1,2					I	121	
		BRAKE SYSTEM				I	I	I	117	
		SKID PLATES, ENGINE GUARD					I	I	132	
	*	CLUTCH SYSTEM				I	I	I	100	
	*	SUSPENSION					I	I	111	
	*	SPARK ARRESTER					C	C	109	
	*	NUTS, BOLTS, FASTENERS				I		I	—	
	**	WHEELS/TIRES				I	I	I	125,165	
	**	STEERING SHAFT HOLDER BEARINGS						I	—	
	**	STEERING SYSTEM						I	—	

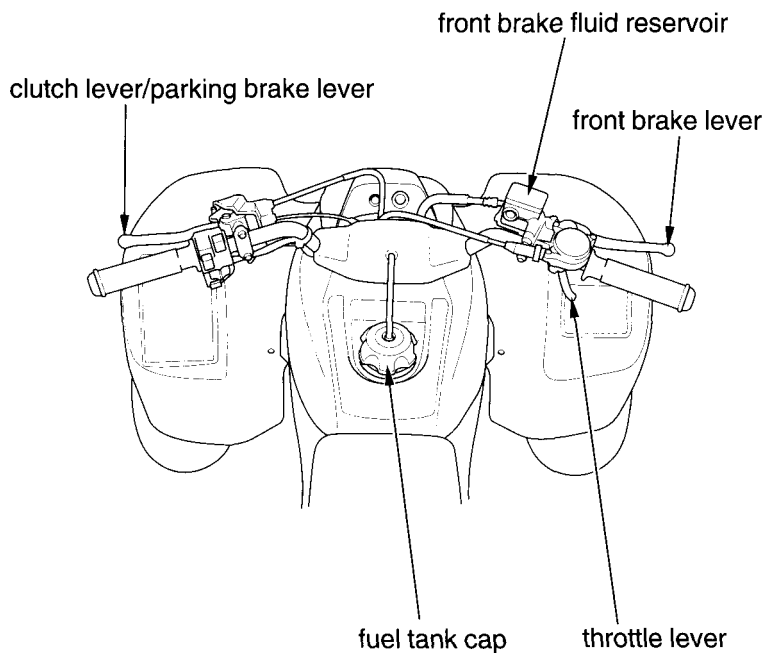
- * Should be serviced by your Honda dealer, unless you have the proper tools and service data and are mechanically qualified. Refer to the official Honda Service Manual (page 188).
- ** In the interest of safety, we recommend these items be serviced only by your Honda dealer.

Maintenance Record

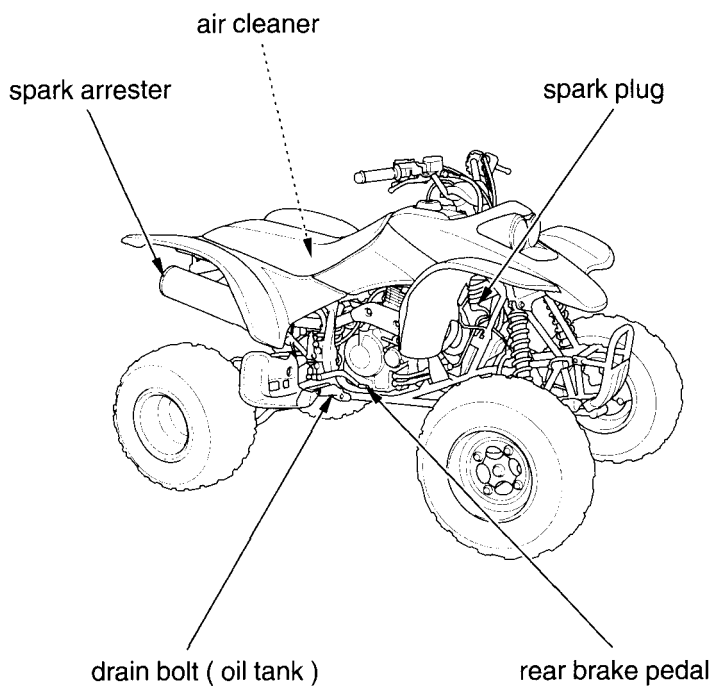
Keeping an accurate maintenance record will help ensure that your ATV is properly maintained. Retain detailed receipts to verify the maintenance was performed. If the ATV is sold, these receipts should be transferred with the ATV to the new owner. Make sure whoever performs the maintenance completes this record. All scheduled maintenance, including the 100 mile (150 km) or 20 hours initial maintenance, is considered a normal owner operating cost and will be charged for by your dealer. Use the space under Notes to record anything you want to remind yourself about or mention to your dealer.

Miles (km) or hours	Date	Performed By:	Notes
100 (150) or 20			
600 (1,000) or 100			
1,200 (2,000) or 200			
1,800 (3,000) or 300			
2,400 (4,000) or 400			
3,000 (5,000) or 500			
3,600 (6,000) or 600			
4,200 (7,000) or 700			
4,800 (8,000) or 800			

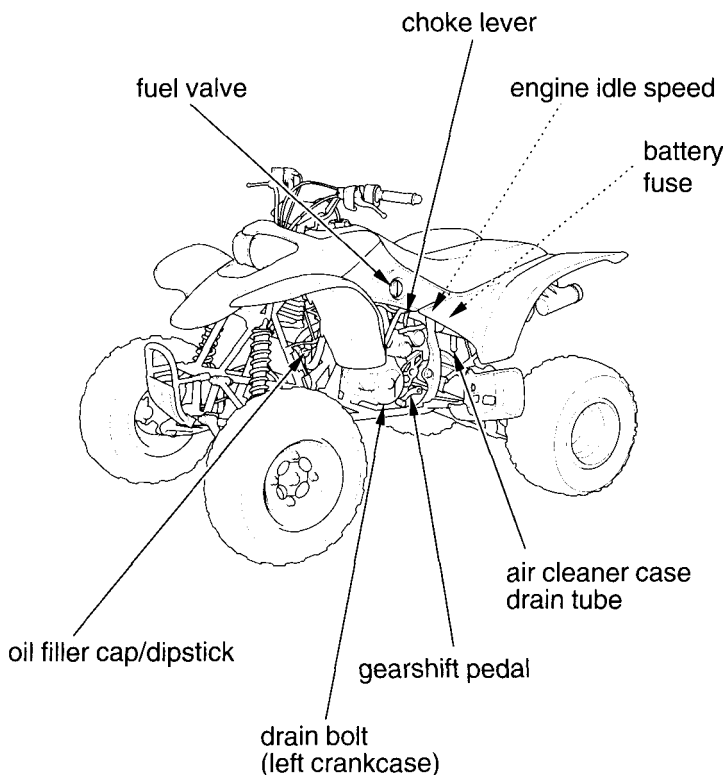
Component Locations



Component Locations



Component Locations



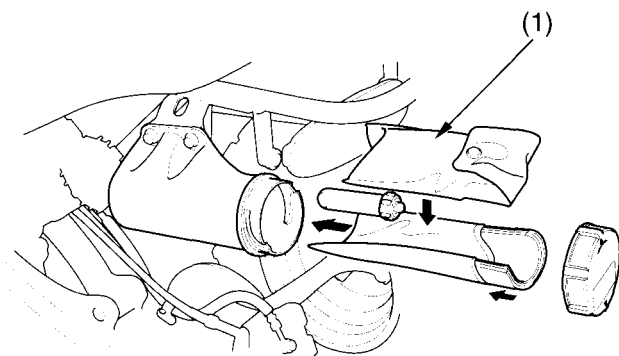
Tool Kit

The tool kit (1) is stored in the storage compartment below the rear fender.

The tools in the kit are sufficient to perform routine maintenance and simple repairs. Any extensive work requiring additional tools should be performed by your Honda dealer.

The tool kit includes the following items:

- * standard/Phillips screwdriver
- * screwdriver handle
- * 6 mm hex wrench
- * spark plug wrench
- * tool bag



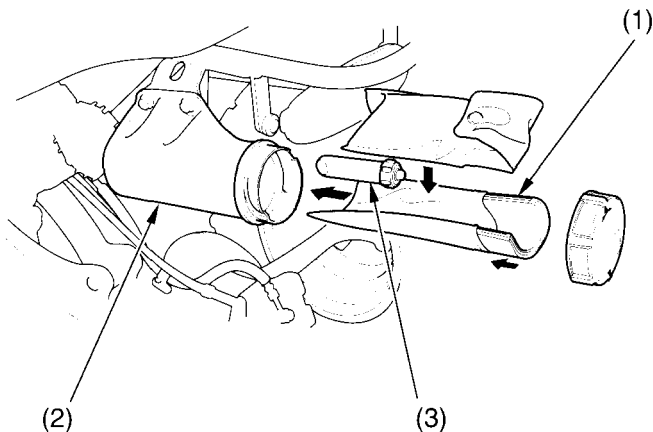
(1) tool kit

Owner's Manual Storage

Your ATV provides storage for the owner's manual so you'll have it with you for easy reference. Store your owner's manual (1) in the storage compartment (2) below the rear fender.

The owner's manual and air pressure gauge (3) should be stored in the storage compartment.

Be careful not to flood this area when washing your ATV or through water.



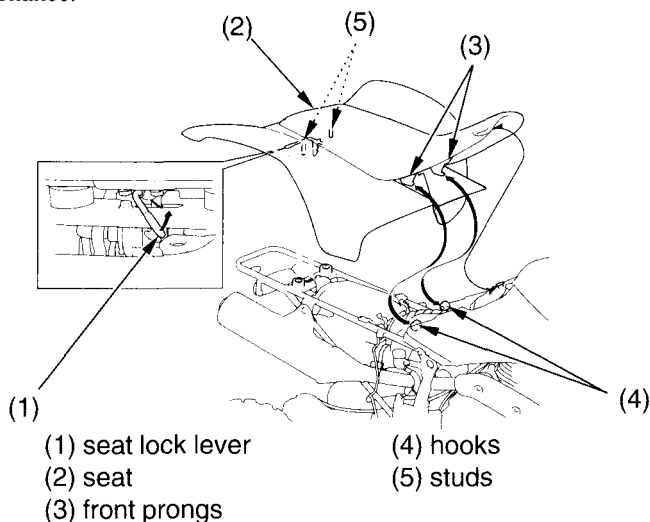
- (1) owner's manual
- (3) air pressure gauge

- (2) storage compartment

Seat Removal

Refer to *Safety Precautions* on page 71 .

The seat must be removed for the air cleaner, battery and fuse maintenance.



Removal

1. Pull up the seat lock lever (1) behind the seat.

2. Slide the seat (2) back and lift it.

If the muffler is hot, take care to lift the seat so that the rear fender does not touch the silencer.

Allowing the rear fender to touch a hot muffler while removing the seat may damage the plastic.

Installation

1. Insert the front prongs (3) into the hooks (4) on the frame and press the studs (5) into the grommets on the frame.

2. Press down on the seat until locks.

Refer to *Safety Precautions* on page 71 .

Fuel Recommendation

type	unleaded
pump octane number	92 (or higher)

We recommend that you use unleaded fuel because it produces fewer engine deposits and extends the life of exhaust system components.

Your engine is designed to use any gasoline that has a pump octane number of 92 or higher. Gasoline pumps at service stations normally display the pump octane number. For information on the use of oxygenated fuels, see page 185 .

Use of lower octane gasoline can cause persistent “pinging” or “spark knock” (a loud rapping noise) which, if severe, can lead to engine damage. Light pinging experienced while operating under a heavy load, such as climbing a hill, is no cause for concern.

If pinging or spark knock occurs at a steady engine speed under normal load, change brands of gasoline. If pinging or spark knock persists, consult your Honda dealer.

Never use stale or contaminated gasoline or an oil/gasoline mixture. Avoid getting dirt, dust, or water in the fuel tank.

Fuel

Fuel Capacity

Fuel tank capacity, including reserve:

2.64 US gal (10.0 l)

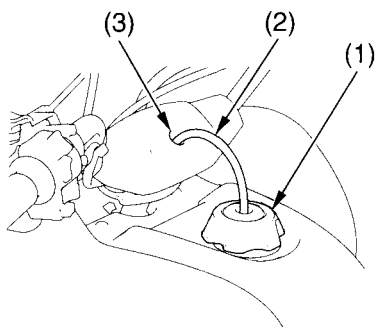
Reserve capacity:

0.42 US gal (1.6 l)

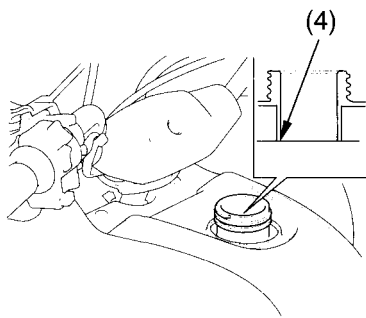
The tank should be refilled as soon as possible after switching to reserve, and the fuel valve should be returned to the ON position after refueling to avoid running out of fuel with no reserve.

Refueling Procedure

Refer to *Safety Precautions* on page 71.



- (1) fuel fill cap
- (2) breather tube



- (3) handle cover hole
- (4) filler neck

1. To open the fuel fill cap (1), turn it counterclockwise.
2. Pull the breather tube (2) out of the handlebar cover hole (3).
3. Add fuel until the level reaches the bottom of the filler neck (4).
Avoid over filling the tank. There should be no fuel in the filler neck.

WARNING

Gasoline is highly flammable and explosive. You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks and flame away.
- Handle fuel only outdoors.
- Wipe up spills immediately.

4. After refueling, turn the fuel fill cap clockwise until it clicks.
5. Insert the breather tube (2) into the handlebar cover hole (3).
6. If the fuel valve was set to RES, turn the fuel valve ON.

If you replace the fuel fill cap, use only a genuine Honda replacement part.

Engine Oil & Filter

Engine oil quality is a major factor that affects both the performance and the service life of the engine.

Using the proper oil (page 87) and filter, and regularly checking, adding, and changing oil will help extend your engine's life. Even the best oil wears out. Changing oil helps get rid of dirt and deposits in the engine. Operating the engine with old or dirty oil can damage your engine. Running the engine with insufficient oil can cause serious damage to the engine and transmission.

Change the engine oil as specified in the maintenance schedule on page 74 . When running in very dusty conditions, oil changes should be performed more frequently than specified in the maintenance schedule.

Engine Oil & Filter

Oil Recommendation

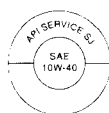
API classification	SG or higher except oils labeled as energy conserving on the circular API service label
viscosity (weight)	SAE 10W-40
JASO T 903 standard	MA
suggested oil*	Pro Honda GN4 or HP4 (without molybdenum additives) 4-stroke oil (USA & Canada), or Honda 4-stroke oil (Canada only), or an equivalent motorcycle oil.

* Suggested oils are equal in performance to SJ oils that are not labeled as energy conserving on the circular API service label.

- Your ATV does not need oil additives. Use the recommended oil.
- Do not use oils with graphite or molybdenum additives. They may adversely affect clutch operation.
- Do not use API SH or higher oils displaying a circular API “energy conserving” service label on the container. They may affect lubrication and clutch performance.



NOT RECOMMENDATION

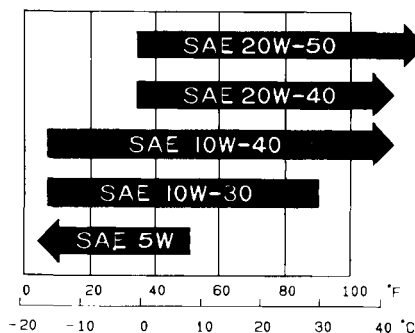


OK

- Do not use non-detergent, vegetable, or castor based racing oils.

Engine Oil & Filter

Other viscosities shown in the following chart may be used when the average temperature in your riding area is within the indicated range.

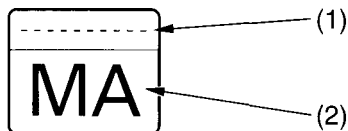


JASO T 903 standard

The JASO T 903 standard is an index to choose engine oils for 4-stroke motorcycle engines.

There are two classes: MA and MB.

Oil conforming to the standard has the following classification on the oil container.



PRODUCT MEETING JASO T 903
COMPANY GUARANTEEING THIS MA PERFORMANCE:

- (1) code number of the sales company of the oil
- (2) oil classification

Engine Oil & Filter

Checking & Adding Oil

Refer to *Safety Precautions* on page 71 .

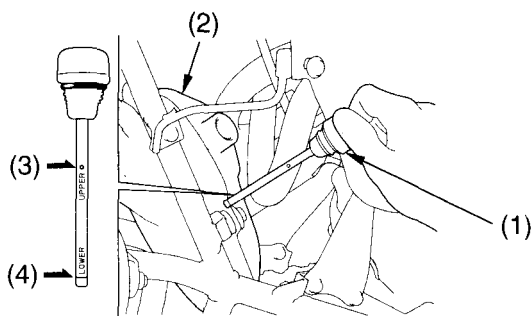
Check the engine oil level each day before operating your ATV and add if needed.

1. Park your ATV on a firm, level surface.
2. Start the engine in a well-ventilated area and let it idle for 5 minutes.
If the air temperature is below 10 °C (50 °F), let the engine idle for an additional 5 minutes (a total of 10 minutes).
An engine that is not warmed sufficiently may give an inaccurate (low) oil level reading.
3. Remove the oil filler cap/dipstick (1) from the oil tank (2) and wipe it clean.
4. Insert the dipstick without screwing it in, then remove the dipstick and check the oil level. The oil level should be between the upper level mark (3) and the lower level mark (4) on the dipstick.
5. If required, add the specified oil into the filler cap hole, up to the upper level mark on the dipstick. Do not overfill.
6. Reinstall the oil filler cap and dipstick.

NOTICE

Running the engine with improper oil level can cause serious engine damage.

Engine Oil & Filter



- (1) oil filter cap/dipstick (3) upper level mark
(2) oil tank (4) lower level mark

The engine contains a crankcase oil level check bolt (5). Remove the bolt and check that the level is flush with the lower edge of the hole. If it is, install and tighten the bolt, start the engine and check the engine oil level. If the crankcase oil level is low, add the recommended engine oil before starting the engine to check the engine oil level.



- (5) check bolt

Engine Oil & Filter

Changing Engine Oil & Filter

Refer to *Safety Precautions* on page 71.

Your ATV's oil filter has very specific performance requirements. Use a new genuine Honda oil filter specified for your model or a filter of equal quality.

NOTICE

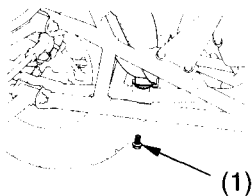
Using the wrong oil filter may result in leaks or premature engine damage.

This procedure requires mechanical skill and professional tools such as a torque wrench and oil filter wrench, as well as a means for disposing of the drained fluid (page 158). If you do not have the skills or the tools, see your Honda dealer.

Drain the Engine Oil:

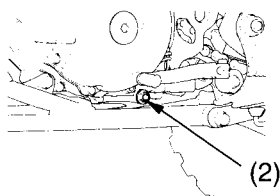
1. With the ATV on level ground, start the engine and let it idle for a few minutes.
2. Stop the engine, place an oil drain pan under the oil tank and crankcase. Remove the oil filler cap/dipstick, the drain bolt A (1) on the oil tank and drain bolt B (2) on the left crankcase.

RIGHT SIDE



(1) drain bolt A

LEFT SIDE



(2) drain bolt B

Engine Oil & Filter

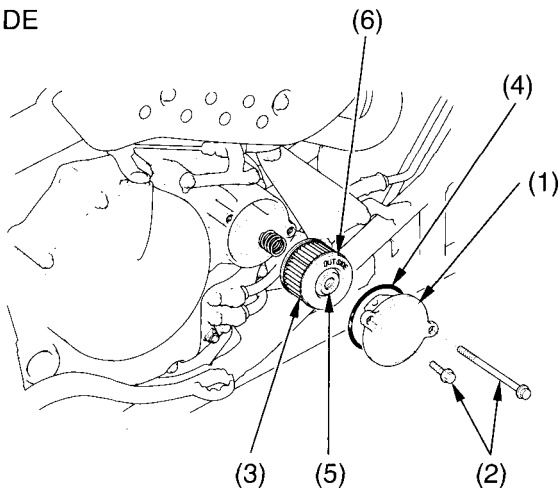
Install a New Engine Oil Filter:

1. Remove the oil filter cover (1) by removing the bolts (2). Let the remaining oil drain out. Discard the oil filter (3).
2. Check that the oil filter cover O-rings (4) are in good condition and then install a new oil filter. Use only the Honda genuine oil filter or a filter of equivalent quality specified for your model. Using the wrong Honda filter or a non-Honda filter which is not of equivalent quality may cause engine damage.
3. Install the filter with the rubber seal (5) facing out, away from the engine. You will see the "OUTSIDE (TOWARDS FILTER COVER)" mark (6) on the filter body, near the seal.

NOTICE

Improper installation of the oil filter can cause serious engine damage.

RIGHT SIDE



- (1) oil filter cover
- (2) bolts
- (3) oil filter

- (4) O-rings
- (5) rubber seal
- (6) OUT-SIDE mark

Engine Oil & Filter

4. Reinstall the oil filter cover, making sure the bolts are tightened to the specified torque:
7 lbf·ft (10 N·m , 1.0 kgf·m)
5. Pour the drained oil into a suitable container and dispose of it in an approved manner (page 158).

NOTICE

Improper disposal of drained fluids is harmful to the environment.

Add Engine Oil:

1. After the oil has drained, make sure the sealing washers on the drain bolts are in good condition.
2. Install the drain bolts and tighten to the specified torque:
Oil tank drain bolt:
14 lbf·ft (20 N·m , 2.0 kgf·m)
Crankcase drain bolt:
18 lbf·ft (25 N·m , 2.5 kgf·m)
3. Fill the oil tank with the recommended grade oil approximately:
1.8 US qt (1.7 ℓ)
4. Reinstall the oil filler cap and dipstick.
5. Start the engine and let it idle for 5 minutes.
6. Stop the engine and after a few minutes, remove the oil filler cap and dipstick.
7. Add the recommended oil up to the upper level mark. (Do not overfill.)
8. Reinstall the oil filler cap and dipstick.
9. Check for oil leaks.

If a torque wrench is not used for installation, see your Honda dealer as soon as possible to verify proper assembly.

Air Cleaner

Refer to *Safety Precautions* on page 71 .

Proper air cleaner maintenance is very important for off-road vehicles. A dirty, water-soaked, worn-out, or defective air cleaner will allow dirt, dust, mud, and other impurities to pass into the engine.

Service the air cleaner more frequently if you ride in unusually wet or dusty areas. Your Honda dealer can help you determine the correct service interval for your riding conditions.

Your ATV's air cleaner has very specific performance requirements. Use a new genuine Honda air cleaner specified for your model or an air cleaner of equal quality.

NOTICE

Using the wrong air cleaner may result in premature engine damage.

Proper air cleaner maintenance can prevent premature engine wear or damage, expensive repairs, low engine power, poor gas mileage, and spark plug fouling.

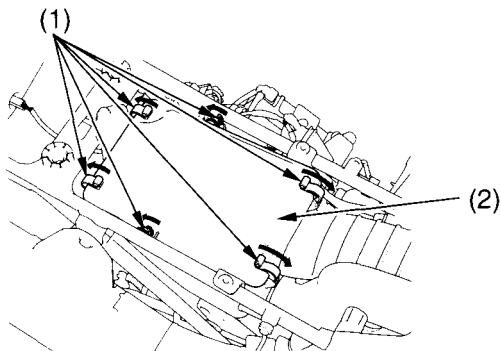
NOTICE

Improper or lack of proper air cleaner maintenance can cause poor performance and premature engine wear.

Cleaning

1. Remove the seat (page 82).

UNDER SEAT



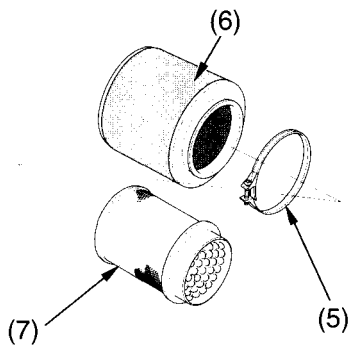
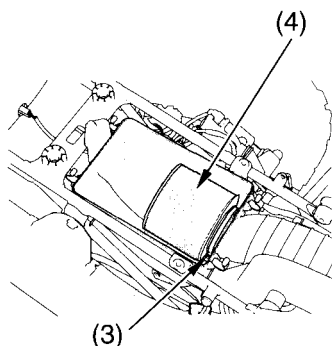
- (1) retainer clips
(2) air cleaner housing cover

2. Unlatch the six retainer clips (1).
3. Remove the air cleaner housing cover (2).
4. Loosen the screw (3) and remove the air cleaner assembly (4) from the air cleaner housing.
5. Unscrew the clamp (5).
6. Remove the air cleaner (6) from the air cleaner body (7).
7. Gently wash the air cleaner in clean, non-flammable (high flash point) solvent such as kerosene — not gasoline. After cleaning, gently squeeze out the remaining solvent. Avoid twisting or wringing the air cleaner. This can tear the foam.
8. Inspect for tears or cracks in the foam or seams of the air cleaner. Replace the air cleaner if it is damaged.

(cont'd)

Air Cleaner

9. Allow the air cleaner to dry thoroughly before applying oil. A wet air cleaner will not fully absorb the oil.
10. Pour clean Pro Honda Foam Filter Oil or an equivalent (Canada: Honda Foam Filter Oil or an equivalent) over the entire surface of the air cleaner. Use both hands to evenly spread the oil into the air cleaner. Gently squeeze out any excess oil. (To keep your hands dry, place the air cleaner in a clean plastic bag before spreading the oil into the air cleaner.)



(3) screw

(4) air cleaner assembly

(5) clamp

(6) air cleaner

(7) air cleaner body

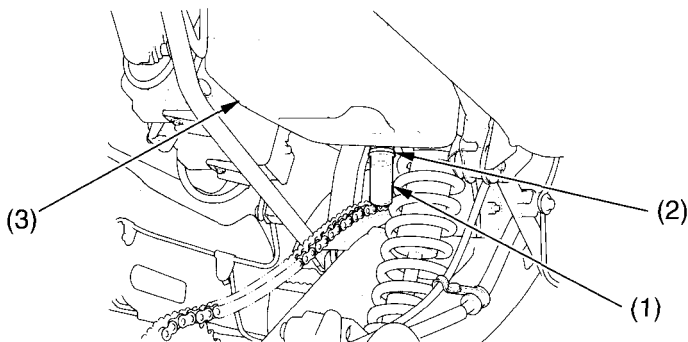
11. Install the air cleaner on the air cleaner body.
12. Apply a thin coat of grease to the sealing surface of the air cleaner assembly.
13. Install the clamp.
14. Insert the air cleaner assembly into the air cleaner housing.
15. Install the air cleaner assembly screw.

Air Cleaner

Air Cleaner Housing Drain Tube

The air cleaner housing drain tube should be serviced in accordance with the Maintenance Schedule. (Riding through water may require more frequent inspection.) If deposits can be seen in the drain tube, the tube must be cleaned before starting the vehicle.

LEFT SIDE



(1) drain tube
(2) clip

(3) air cleaner case

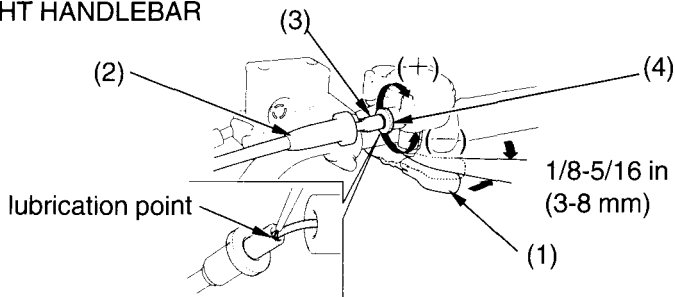
1. Remove the drain tube (1) by removing the clip (2) under the air cleaner case (3).
2. Drain the deposits.
3. Reinstall the drain tube, securing it with the clip.

Throttle

Throttle Freeplay

Refer to *Safety Precautions* on page 71 .

RIGHT HANDLEBAR



- (1) throttle lever
- (2) rubber sleeve
- (3) throttle cable adjuster
- (4) lock nut

- (+) increase freeplay
- (-) decrease freeplay

Inspection

Check freeplay at the throttle lever (1)

Freeplay:

1/8 – 5/16 in (3 – 8 mm)

Adjustment

1. Slide the rubber sleeve (2) back to expose the throttle cable adjuster (3).
2. Loosen the lock nut (4).
3. Turn the adjuster to obtain the correct freeplay.
4. Tighten the lock nut and reinstall the sleeve.
5. After adjustment, check for smooth operation of the throttle lever from fully closed to fully open in all steering positions.

Throttle Inspection

Refer to *Safety Precautions* on page 71.

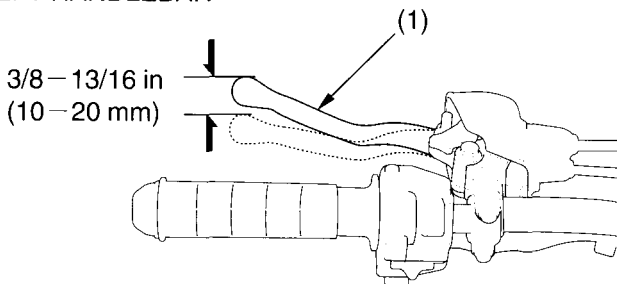
1. Check that the throttle assembly is positioned properly and the securing bolts are tight.
2. Check for smooth operation of the throttle lever from fully open to fully closed in all steering positions. If there is a problem, see your Honda dealer.
3. Inspect the condition of the throttle cables from the throttle lever down to the carburetor. If the cable is kinked or chafed, have it replaced.
4. Check the cables for tension or stress in all steering positions.
5. Lubricate the cables with a commercially-available cable lubricant to prevent premature wear and corrosion.

Clutch System

Clutch Adjustment

Refer to *Safety Precautions* on page 71 .

LEFT HANDLEBAR



(1) clutch lever

Clutch adjustment may be required if the ATV stalls when shifting into gear, if it tends to creep, or if the clutch slips, causing acceleration to lag behind engine speed.

Inspection

Check freeplay.

Freeplay:

3/8 - 13/16 in (10 - 20 mm)

If necessary, adjust to the specified range.

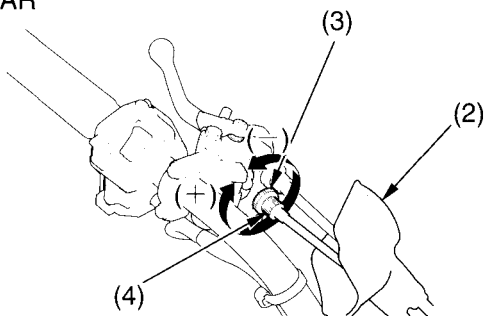
Improper freeplay adjustment can cause premature clutch wear.

Clutch System

Upper Adjustment

Minor adjustments are generally made with the upper clutch cable adjuster.

LEFT HANDLEBAR



(2) dust cover

(3) upper lock nut

(4) upper clutch cable
adjuster

(+) increase freeplay

(-) decrease freeplay

1. Pull back the dust cover (2). Loosen the lock nut (3) and turn the clutch cable adjuster (4). Tighten the lock nut and check the adjustment.
2. If the cable adjuster is threaded out near its limit or the correct free play cannot be obtained using the cable adjuster, a major adjustment must be made. Loosen the lock nut and turn in the cable adjuster completely. Tighten the lock nut and pull on the dust cover.

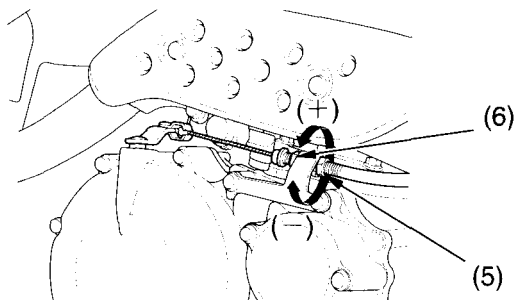
If proper adjustment cannot be obtained or the clutch does not work correctly, the cable or clutch friction discs may be worn. See your Honda dealer.

Clutch System

Lower Adjustment

The lower clutch cable adjuster is used if the upper clutch cable adjuster is threaded out near its limit — or the correct freeplay cannot be obtained.

RIGHT SIDE



(5) lower lock nut

(+) increase freeplay

(6) lower adjusting nut

(-) decrease freeplay

1. Loosen the upper lock nut (5) and turn the upper clutch cable adjuster (4) all the way in (to provide maximum freeplay).
2. Tighten the upper lock nut and pull the dust cover (2) back to its normal position.
3. Hold the lower adjusting nut (6) and loosen the lower lock nut (5) at the lower end of the cable.
4. Turn the lower adjusting nut to obtain the specified freeplay.
5. Hold the lower adjusting nut and tighten the lower lock nut. Check the adjustment.

Clutch System

6. Start the engine, pull the clutch lever in, and shift into gear. Make sure the engine does not stall and the ATV does not creep. Gradually release the clutch lever and open the throttle. Your ATV should move smoothly and accelerate gradually.

Check the cable for loose connections or other damage. If the cable is worn or kinked, have it replaced by your Honda dealer.

Other Inspections & Lubrication

- Check that the clutch lever assembly is positioned properly and the securing bolts are tight.
- Check the clutch cable for kinks or signs of wear. If necessary, have it replaced.
- Lubricate the clutch cable with a commercially-available cable lubricant to prevent premature wear and corrosion.

Engine Idle Speed

The best way to assure proper carburetion is to see your Honda dealer for regularly scheduled servicing, including carburetor adjustment.

Remember, idle speed adjustment is not a “cure-all” for other problems in your engine’s fuel-delivery system. Adjusting the idle will not compensate for a fault elsewhere.

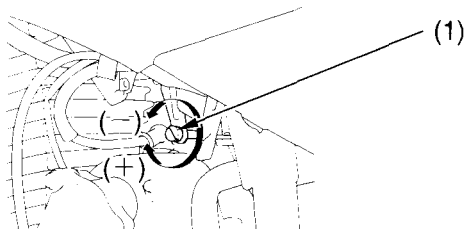
The engine must be at normal operating temperature for accurate idle speed adjustment.

For information about high altitude carburetor adjustment, see page 181 .

Idle Speed Adjustment

Refer to *Safety Precautions* on page 71 .

LEFT SIDE



(1) throttle stop screw

(+) increase

(-) decrease

1. If the engine is cold, start it and warm it up with ten minutes of stop-and-go riding. Stop the engine.
2. Park your ATV on a firm, level surface.
3. Connect a tachometer to the engine.
4. Shift into neutral. Start the engine.
5. Adjust idle speed by turning the throttle stop screw (1).

Idle speed (in neutral):

1,400 $\pm$ 100 rpm

Spark Plug

Spark Plug Recommendation

standard spark plug	DPR8Z (NGK) or X24GPR-U (DENSO)
for extended high speed riding	DPR9Z (NGK) or X27GPR-U (DENSO)

Use only the recommended type of spark plug in the recommended heat range.

NOTICE

Using spark plugs with an improper heat range can cause engine damage.

Spark Plug Replacement & Inspection

Refer to *Safety Precautions* on page 71 .

1. Clean any dirt from around the spark plug base.
2. Disconnect the spark plug cap. Take care to avoid damaging the spark plug wire when disconnecting the cap.
3. Using the spark plug wrench provided in the tool kit, remove the spark plug.

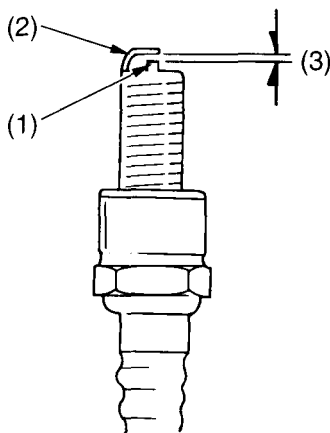
(cont'd)

Spark Plug

4. Inspect the electrodes and center porcelain for deposits, corrosion, or carbon fouling. If the corrosion or deposits are heavy, replace the plug. Clean a carbon or wet-fouled plug with a plug cleaner, if available, or a wire brush. Inspect the spark plug electrodes for wear. The center electrode (1) should have a flat tip and sharp edges, and the side electrode (2) should not be eroded. If the electrodes and insulator tip appear unusually fouled or burned, we suggest that you contact your Honda dealer.
5. Discard the spark plug if there is apparent wear or if the insulator is cracked or chipped.
6. Using a wire-type feeler gauge, check the spark plug gap (3). If adjustment is necessary, bend the side electrode carefully.

The gap should be:

0.024 – 0.028 in (0.60 – 0.70 mm)



(1) center electrode
(2) side electrode

(3) spark plug gap

Spark Plug

7. With the plug washer attached, thread the spark plug in by hand to prevent cross-threading.

Tighten the spark plug:

- about 1/8 – 1/4 turn after it seats (if the old plug is good).
- about 1/2 turn after it seats (if installing a new plug).

NOTICE

Improperly tightened spark plug can damage the engine. If a plug is too loose, a piston may be damaged. If a plug is too tight, the threads may be damaged.

Valves

Valve Inspection

Refer to *Safety Precautions* on page 71 .

Valve clearance should be:

Intake: 0.004 in (0.10 mm)

Exhaust: 0.005 in (0.12 mm)

Excessive clearance will cause noise. Insufficient clearance will cause loss of power and possibly damage the valves.

For those who are mechanically proficient and have the proper tools, instructions on adjusting valve clearances are given in the official Honda Service Manual. All others should have valves adjusted by your Honda dealer.

Spark Arrester

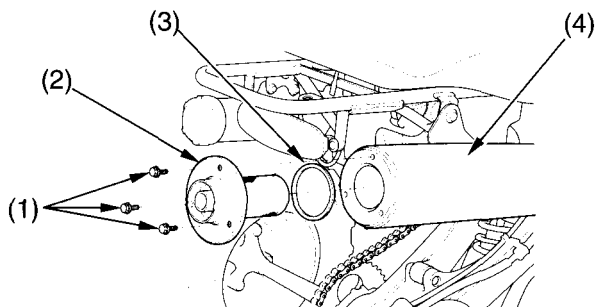
Refer to *Safety Precautions* on page 71.

Regular servicing prevents carbon build up (which can diminish engine performance) and also complies with USDA regulations for regular maintenance to assure proper function. The spark arrester prevents random sparks from the combustion process in your engine from reaching the environment.

The use of safety glasses is recommended for this procedure.

Because of the possible fire hazard, check that there are no combustible materials in the area before purging the spark arrester.

REAR



(1) bolts

(2) spark arrester

(3) gasket

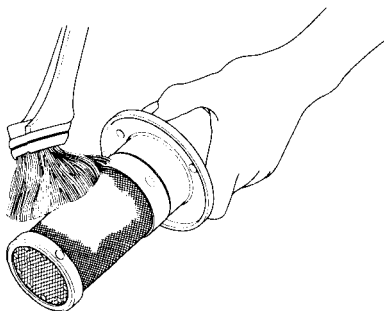
(4) muffler

1. Allow the engine and muffler to cool.
2. Remove the three bolts (1), the spark arrester (2), and the gasket (3) from the muffler (4).

(cont'd)

Spark Arrester

3. Use a brush to remove carbon deposits from the spark arrester screen. Be careful to avoid damaging the spark arrester screen. The spark arrester must be free of breaks and holes. Replace, if necessary. Check the gasket. Replace, if necessary.



4. Install the spark arrester and the gasket in the muffler and tighten the three bolts securely.

Suspension

Your front and rear suspension systems use springs and hydraulic damping devices that suspend your weight and most of the weight of your ATV.

The spring pre-loads for your suspension system adjust the amount of force required to begin compression of the spring.

The oil damper systems hydraulically control the natural compression and rebound of the suspension springs so that traction and comfort are maintained as the wheels ride over road surfaces.

Consider adjusting your suspensions pre-load whenever you change your normal load, by adding or subtracting accessories, or when the road or riding conditions change.

The way you ride your ATV and the type of ride you want to experience can also influence your suspension needs.

You may adjust the spring pre-load of both suspension systems. You may also adjust the rebound damping of the rear suspension system.

Lower spring pre-load provides a softer ride and is usually preferred for light loads and smooth roads. Higher spring pre-load provides a firmer ride and is recommended for heavy loads, rough road conditions, and faster, more challenging riding.

Suspension

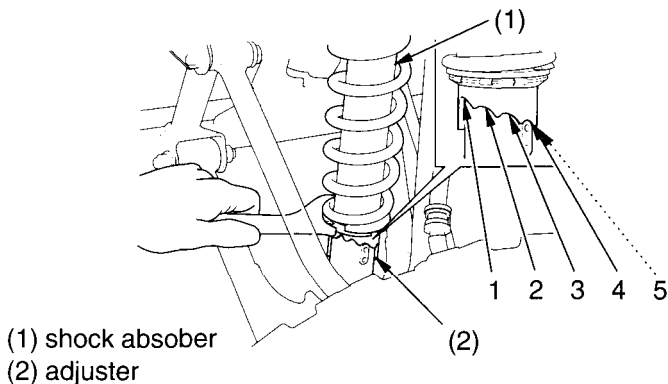
Front Suspension Adjustment

The front suspension can be adjusted for rider weight and riding conditions by changing the spring pre-load and rebound damping.

The front shock absorber assembly includes a damper unit that contains high pressure nitrogen gas. Do not attempt to disassemble, service, or dispose of the damper; see your Honda dealer. The instructions found in this owner's manual are limited to adjustments of the shock assembly only.

Front Suspension Spring Pre-load

Refer to *Safety Precautions* on page 71 .



The spring pre-load adjuster (2) has 5 positions for different load or riding conditions.

Use the spanner to adjust the shock spring pre-load.

Suspension

Position 1: for a light load and smooth road conditions.

Position 2: standard position.

Positions 3 to 5: for when the ATV is more heavily loaded. (Also increase spring pre-load for stiffer suspension.)

Make sure that both shock absorbers are adjusted to the same position.

Always adjust the shock absorber position in sequence (1-2-3-4-5 or 5-4-3-2-1). Attempting to adjust directly from 1 to 5 or 5 to 1 may damage the shock absorber.

Suspension

Rear Suspension Adjustment

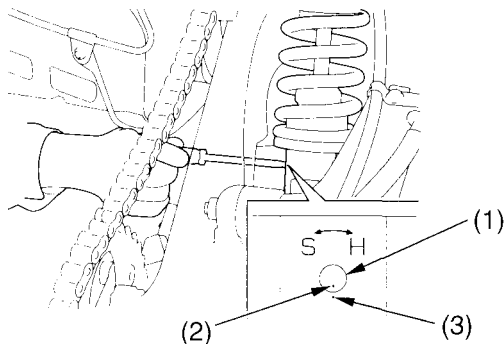
The rear suspension can be adjusted for rider weight and riding conditions by changing the spring pre-load and rebound damping.

The rear shock absorber assembly includes a damper unit that contains high pressure nitrogen gas. Do not attempt to disassemble, service, or dispose of the damper; see your Honda dealer. The instructions found in this owner's manual are limited to adjustments of the shock assembly only.

Rear Suspension Damping

Refer to *Safety Precautions* on page 71 .

Rebound Damping



- (1) damping adjuster
- (2) punch mark
- (3) reference punch mark

Suspension

1. Turn the damping adjuster (1) clockwise until it will no longer turn (lightly seats). This is the full hard setting.
2. Turn the adjuster counterclockwise approximately 1.5 turns so that the punch mark (2) on the adjuster aligns with the reference punch mark (3). This is the standard position.

To Reduce Rebound Damping (SOFT):

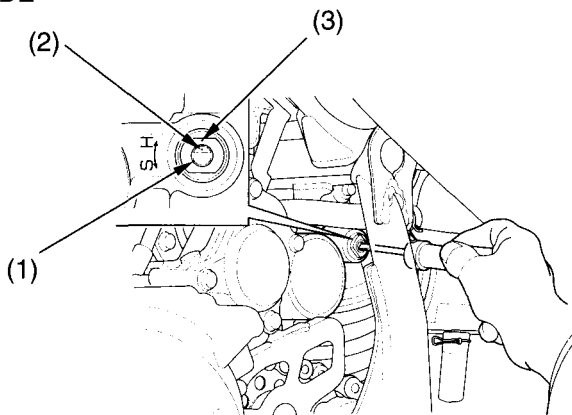
For a light load and smooth road conditions, turn the adjuster counterclockwise toward SOFT (S).

To Increase Rebound Damping (HARD):

For a firmer ride and rough road conditions, turn the adjuster clockwise toward HARD (H).

Compression Damping

LEFT SIDE



- (1) damping adjuster
- (2) punch mark
- (3) reference punch mark

Suspension

To adjust to the standard position:

1. Turn the damping adjuster (1) clockwise until it will no longer turn (lightly seats). This is the full hard setting.
2. Turn the adjuster counterclockwise approximately 2 turns so that the punch mark (2) on the adjuster aligns with the reference punch mark (3). This is the standard position.

To Reduce Compression Damping (SOFT):

For a light load and smooth road conditions, turn the adjuster counterclockwise toward SOFT (S).

To Increase Compression Damping (HARD):

For a firmer ride and rough road conditions, turn the adjuster clockwise toward HARD (H).

The hydraulic braking systems on your ATV dissipate the heat generated by the friction of the brake pads on the brake discs as the wheels are slowed.

As the brake pads wear, the brake fluid level will drop. A leak in the system will also cause the level to drop.

There are no adjustments to perform, but fluid level and pad wear must be inspected periodically. The system must be inspected frequently to ensure there are no fluid leaks.

If the brake lever or brake pedal freeplay does not feel within the normal range while riding, check the brake pads for wear (page 119). Worn pads should be replaced. If the pads are not worn beyond the recommended limit, there is probably air in the brake system. See your Honda dealer to have the air bled from the system.

Brake Fluid Recommendation

brake fluid	Honda DOT 4 Brake Fluid
-------------	-------------------------

The recommended brake fluid is Honda DOT 4 Brake Fluid, or any brake fluid of equal quality and performance. Use fresh brake fluid from a sealed container. Be sure to read the label before opening the sealed container. An opened container may be contaminated or may have absorbed moisture from the air.

Brakes

Fluid Level Inspection

Refer to *Safety Precautions* on page 71 .

If your inspection indicates a low fluid level, have your Honda dealer add the recommended fluid.

Do not add or replace brake fluid, except in an emergency. If you do add fluid, have your Honda dealer check the system as soon as possible.

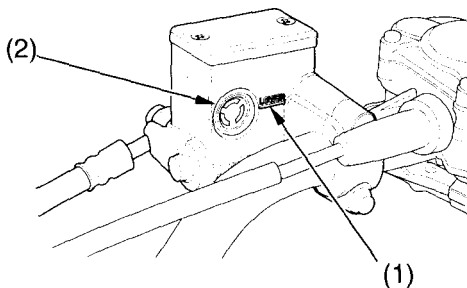
NOTICE

Brake fluid can damage plastic and painted surfaces. Handle with care.

Wipe up spills immediately. Avoid contact with skin or eyes. In case of contact, wash thoroughly and call a doctor immediately if it contacts your eyes.

Front Brake Fluid Level

RIGHT HANDLEBAR



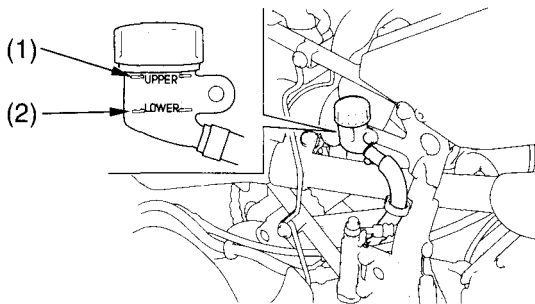
- (1) LOWER level mark
- (2) inspection window

With the ATV in an upright position, check the fluid level. It should be above the LOWER level mark (1). If the level is at or below the LOWER level mark, check the brake pads for wear (page 119).

Worn brake pads should be replaced. If the pads are not worn, have your brake system inspected for leaks.

Rear Brake Fluid Level

RIGHT SIDE



- (1) UPPER level mark
- (2) LOWER level mark

With the ATV in an upright position, check the fluid level. It should be between the UPPER (1) and LOWER (2) level mark. If the level is at or below the LOWER level mark, check the brake pads for wear (page 119).

Worn brake pads should be replaced. If the pads are not worn, have your brake system inspected for leaks.

Brakes

Other Inspection

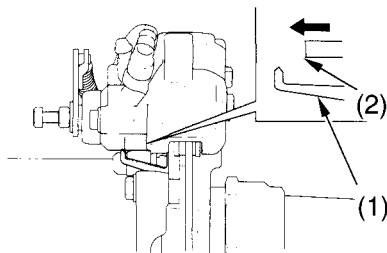
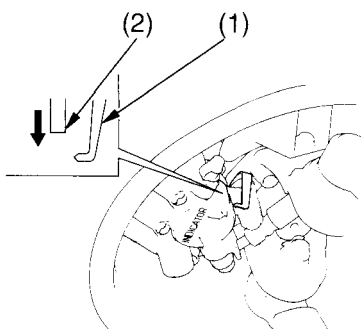
- Make sure there are no fluid leaks.
- Check for deterioration or cracks in the hoses and fittings. If the hoses are worn or cracked, have them replaced by your Honda dealer.

Brake Pad Wear

Refer to *Safety Precautions* on page 71 .

Brake pad wear will depend upon the severity of usage and riding conditions. The pads will wear faster in wet or muddy conditions. Inspect the pads visually during all regular service intervals to determine the pad wear.

RIGHT FRONT (Left side similar) REAR



(1) wear indicator

(2) edge of reference mark

Front brake pads/Rear brake pads — If the wear indicator (1) aligns with the edge of the reference mark (2), both pads must be replaced, see your Honda dealer for this replacement.

Always inspect both pads in both the right and left front brake calipers.

Brakes

Other Inspection

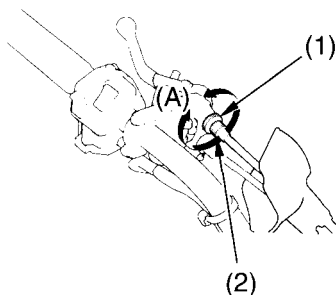
- Make sure there are no fluid leaks.
 - Check for deterioration or cracks in the hoses and fittings.
 - The rear brake pedal pivot must be inspected according to the Maintenance Schedule.
- See your Honda dealer for this service.

Parking Brake Adjustment

Refer to *Safety Precautions* on page 71 .

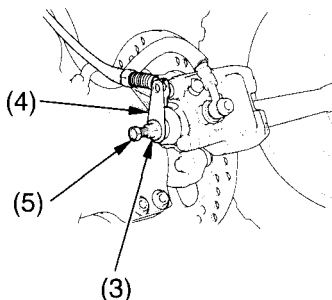
Parking brake adjustment may be required if the parking brake does not hold properly.

LEFT HANDLEBAR



- (1) lock nut
- (2) adjuster

REAR



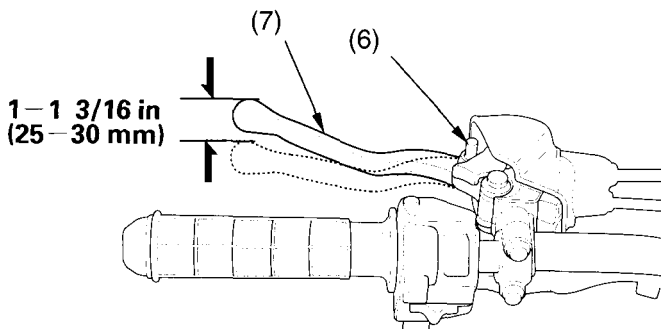
- (3) lock nut
- (4) parking brake arm
- (5) adjusting bolt
- (A) screw in

1. Temporarily adjust the clutch lever free play to more than $1 \frac{3}{16}$ in (30 mm) (page 100).
2. Loosen the lock nut (1) on the parking brake cable, and screw in the adjuster (2) completely.
3. Loosen the lock nut (3) on the parking brake arm (4) and turn the adjusting bolt (5) clockwise until you feel resistance.
4. Then turn the adjusting bolt (5) $\frac{1}{8}$ counterclockwise, and tighten the lock nut (3).

Brakes

5. Push down the parking brake pin (6) and then squeeze the clutch lever (7) until firm resistance is felt. Measure the distance the clutch lever has moved; the distance should be:
1 – 1 3/16 in (25 – 30 mm)
6. If necessary, turn the adjuster (2) and tighten the lock nut (1).
Adjust the clutch lever free play (page 100) is:
3/8 – 13/16 in (10 – 20 mm)

LEFT HANDLEBAR



- (6) parking brake pin
(7) clutch/parking brake lever

To safely operate your ATV, your tires must be the proper type and size, in good condition with adequate tread, and correctly inflated.

WARNING

Using tires that are excessively worn or improperly inflated can cause a crash in which you can be seriously hurt or killed.

Follow all instructions in this owner's manual regarding tire inflation and maintenance.

This ATV is equipped with low pressure tubeless tires. Although the tires are designed specifically for off-road use, they are not immune to punctures. Always select your riding area with care.

The following pages give detailed information on how and when to check your air pressure, how to inspect your tires for wear and damage, and our recommendations for tire repair and replacement.

Tires

Air Pressure

Refer to *Safety Precautions* on page 71 .

Properly inflated tires provide the best combination of handling, tread life, and riding comfort. Generally, underinflated tires wear unevenly, adversely affect handling, and are more likely to fail from being overheated. Overinflated tires make your ATV ride more harshly, are more prone to damage from surface hazards, and wear unevenly.

Make sure the valve stem caps are secure. If necessary, install a new cap.

Tires

Always check air pressure when your tires are “cold.” If you check air pressure when your tires are “warm” — even if your ATV has only been ridden for a few miles — the readings will be higher. If you let air out of warm tires to match the recommended cold tire pressures, the tires will be underinflated. Be sure to check tire pressure at the riding site, since changes in altitude can affect air pressure.

The recommended “cold” tire pressures are:

	FRONT	REAR
RECOMMENDED PRESSURE	4.0 psi (27 kPa , 0.275 kgf/cm ²)	4.0 psi (27 kPa , 0.275 kgf/cm ²)
MAXIMUM PRESSURE	4.6 psi (31 kPa , 0.315 kgf/cm ²)	4.6 psi (31 kPa , 0.315 kgf/cm ²)
MINIMUM PRESSURE	3.4 psi (23 kPa , 0.235 kgf/cm ²)	3.4 psi (23 kPa , 0.235 kgf/cm ²)

Tires

A manually operated tire pump should be used rather than the high pressure system found in service stations. This will minimize the possibility of tire damage from overinflation. If you use a high pressure system at a service station, add air in small amounts and check the pressure increase frequently to prevent possible tire damage from overinflation.

WARNING

Operating this ATV with improper tires, or with uneven tire pressure may cause loss of control, and you could be seriously injured or killed.

- Always use the size and type tires specified in this owner's manual for this vehicle.
- Always maintain proper tire pressure as described in this owner's manual.

Inspection

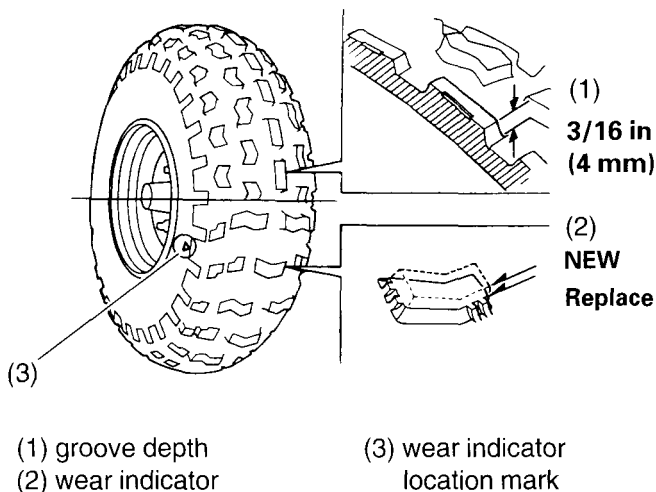
Refer to *Safety Precautions* on page 71.

Whenever you check the tire pressures, you should also look for:

- Bumps or bulges in the side of the tire or the tread. Replace any tire that has a bump or bulge.
- Cuts, slits, or cracks in the tires. Replace the tire if you can see fabric or cord.
- Nails or other foreign objects embedded in the side of the tire or tread.
- Excessive tread wear.

Also, if you hit a pothole or other hard object while riding, stop as soon as you safely can and carefully inspect the tires for damage.

Tread Wear



To check the condition of a tire tread, measure the groove depth (1) in the center of the tire, or check the wear indicator (2).

For best performance, you should replace a tire before the tread depth at the center reaches the following limits:

front	3/16 in (4 mm)
rear	3/16 in (4 mm)

Tires

Tire Repair

Refer to *Safety Precautions* on page 71 .

A tire that is repaired, either temporarily or permanently, will have lower speed and performance limits than a new or undamaged tire.

A temporary repair can sometimes be made in an emergency situation. However, since a temporary repair may not hold, you must ride very slowly, and have the tire replaced or permanently repaired as soon as possible. (For more information on temporary repairs, see *If You Have a Flat Tire*, page 165 .)

A permanent repair, such as an internal plug patch, can be made if a tire has only a small puncture in the tread area. However you may not be able to safely carry as much weight. If you choose to have a tire repaired, be sure the repair work is performed by a professional.

If you have a tire professionally repaired at a non-Honda facility, we recommend that you have the work checked by your Honda dealer.

Tire Replacement

Refer to *Safety Precautions* on page 71 .

The tires that came on your ATV were designed to match the performance capabilities of your ATV and provide the best combination of handling, braking, and comfort.

It is best to replace all four tires, however if that is not possible, you must replace the tires in pairs (front or rear) with tires of the same size and type as the originals. Never replace just one tire.

WARNING

Installing improper tires on your ATV can affect handling and stability. This can cause a crash in which you can be seriously hurt or killed.

Always use the size and type of tires recommended in this owner's manual.

The recommended tires for your ATV are:

front	AT 22 × 7-10 ★★	M/R 101 OHTSU
rear	AT 20 × 10-9 ★★	M/R 501 OHTSU

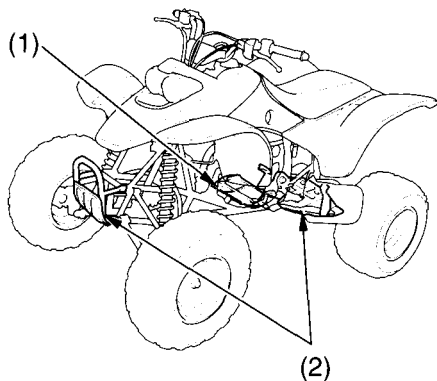
When you replace a tire, remember:

Have the tire replaced by your Honda dealer if possible.

If you have a tire professionally replaced at a non-Honda facility, we recommended that you have the work checked by your Honda dealer.

Engine Guard & Skid Plates

Refer to *Safety Precautions* on page 71.



(1) engine guard

(2) skid plates

The engine guard (1) protects the engine crankcase.

The skid plates (2) protect the frame/lower arm, the drive components and the rear brake. Check the guard and plates for cracks, damage or looseness at intervals shown in the Maintenance Schedule.

Have the engine guard and skid plates replaced if they are cracked or damaged. If the guard and plate bolts are loose, tighten them securely.

Drive Chain

An endless (riveted master link) chain connects the countershaft and rear wheel sprockets. The O-ring chain uses rubber rings between the side plates of the pin and roller links to seal in the manufacturer-installed lubricating grease and keep out moisture and dirt.

The service life of the chain depends on proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain or sprockets.

The drive chain should be checked, adjusted, and lubricated as part of the pre-ride inspection (page 29).

Under severe usage, or when the ATV is ridden in unusually dusty or muddy areas, more frequent maintenance will be necessary.

Before servicing your drive chain, turn the engine OFF and check that your transmission is in neutral.

It is not necessary to remove or replace the drive chain to perform the recommended service in the Maintenance Schedule.

Inspection

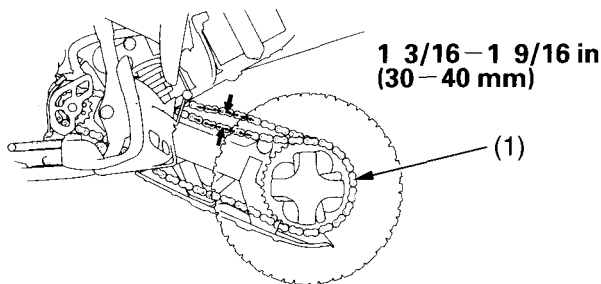
Refer to *Safety Precautions* on page 71 .

1. Chain slack should be checked by measuring the amount of chain slack midway between the sprockets. The amount of slack should be:
1 3/16 – 1 9/16 in (30 – 40 mm)

(cont'd)

Drive Chain

LEFT SIDE



(1) drive chain

2. Check drive chain slack at several points along the chain. The slack should remain constant. If it isn't, some links may be kinked and binding. Lubricating the chain will often eliminate binding and kinking.

NOTICE

Excessive chain slack may allow the drive chain to damage the engine cases.

3. Inspect the drive chain for:

- damaged rollers
- loose pins
- dry or rusted links
- kinked or binding links
- excessive wear
- damaged or missing O-rings

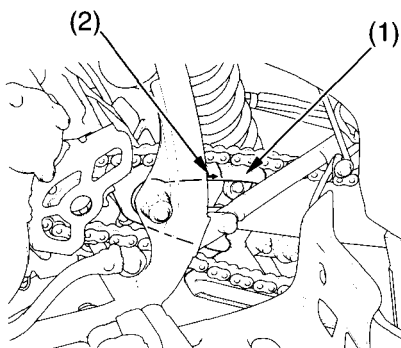
Replace the drive chain (page 138) if it has damaged rollers, loose pins, or kinks that cannot be freed. Lubricate the drive chain (page 137) if it appears dry or shows signs of rust. Lubricate any kinked or binding links and work them free. Adjust chain slack if needed.

Drive Chain

4. Check the drive chain slider (1) at the intervals specified in the Maintenance Schedule.

The chain slider must be replaced if it is worn to the wear limit line (2). For replacement, see your Honda dealer.

LEFT SIDE



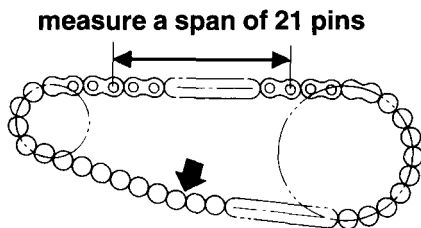
(1) drive chain slider

(2) wear limit line

5. With the upper or lower section of drive chain tight between the sprockets measure the distance between a span of 21 pins from pin center to pin center. If the distance exceeds the service limit, the chain is worn out and should be replaced.

Service limit:

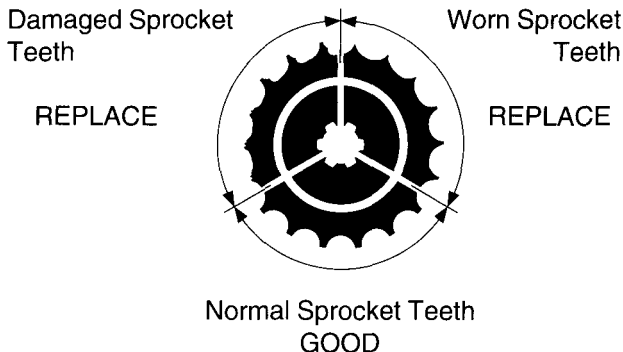
12.56 in (319.1 mm)



(cont'd)

Drive Chain

6. Inspect the front and rear sprocket teeth for excessive wear or damage.
If necessary, have your Honda dealer replace a worn sprocket.



NOTICE

Use of a new chain with worn sprockets will cause rapid chain wear.

Adjustment

Refer to *Safety Precautions* on page 71.

1. To adjust slack, use an Allen wrench (1) to loosen the rear axle holder fixing bolts (2).
2. Turn the adjuster (3) to decrease or increase chain slack.
3. Retighten the rear axle holder fixing bolts.

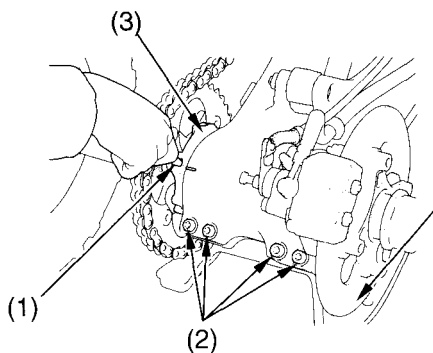
Rear axle holder fixing bolts torque:

15 lbf·ft (21 N·m , 2.1 kgf·m)

If a torque wrench is not used for this installation, see your Honda dealer as soon as possible to verify proper assembly.

Drive Chain

REAR

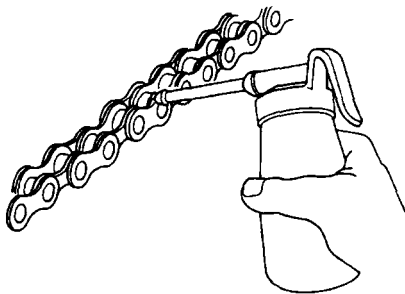


(1) allen wrench
(2) fixing bolts

(3) adjuster

Lubrication

Refer to *Safety Precautions* on page 71.



Lubricate every 30 days of riding or sooner if chain appears dry.

Lubricate only with SAE 80 or 90 gear oil. Commercial chain lubricants may contain solvents which could damage the rubber O-rings.

Drive Chain

Removal, Cleaning & Replacement

Refer to *Safety Precautions* on page 71.

Your ATV has an endless (riveted master link) type chain. It should only be removed or replaced by your Honda dealer.

The O-rings can be damaged by steam cleaning, high pressure washers, and certain solvents.

1. Clean the side surfaces of the chain with a dry cloth. Use a high flashpoint solvent such as kerosene — not gasoline.
Do not brush the rubber O-rings.
Brushing will damage them. Use of a solvent may also damage the O-rings.
2. Inspect the drive chain for possible wear or damage.

Replace the drive chain if it has damaged rollers, loose fitting links, damaged O-rings, or otherwise appears unserviceable.

Replacement Chain:

DID520V6 or RK520 SMOZ10S

Battery

Your ATV has a maintenance-free type battery. You do not have to check the battery electrolyte level or add distilled water as you would with a conventional-type battery.

NOTICE

Your battery is a maintenance-free type and can be permanently damaged if the cap strip is removed.

Electrical accessories use current from the battery — even when the ignition is OFF. Limited operation also allows the battery to discharge. If you have electrical accessories on your ATV — or do not ride frequently, we recommend that you charge the battery frequently (see *Battery Charging*, page 143).

If you do not expect to ride your ATV for at least two weeks, we recommend you remove the battery — or at least disconnect the battery cables (negative cable first).

If you plan to store your ATV, see *Battery Storage*, page 140 .

If your battery seems weak and/or is leaking electrolyte (causing slow starting or other electrical problems), see your Honda dealer.

WARNING: Battery posts, terminals and related accessories contain lead and lead compounds. **Wash your hands after handling.**

Battery

Battery Storage

Refer to *Safety Precautions* on page 71.

If you plan to store your ATV, we recommend you remove the battery and store it where it can be charged at least every 30 days to maintain its service life.

If you do not remove the battery, we recommend disconnecting the battery cables (negative cable first).

You will get the best storage results from removing the battery and slow (trickle) charging it every 30 days (see *Battery Charging*, page 143).

Before you remove the battery, be sure to read all the information that follows, as well as the information on the battery label.

WARNING

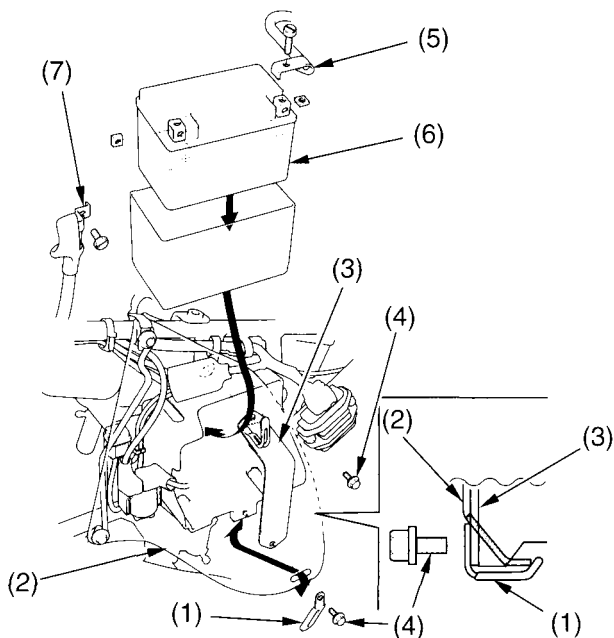
The battery gives off explosive hydrogen gas during normal operation.

A spark or flame can cause the battery to explode with enough force to kill or seriously hurt you.

Wear protective clothing and a face shield, or have a skilled mechanic do the battery maintenance.

Battery

The battery is located in a compartment under the rear fender.



(1) clip

(2) battery cover

(3) battery holder

(4) mount bolt

(5) negative (-) terminal lead

(6) battery

(7) positive (+) terminal lead

1. Make sure the ignition switch is OFF ($\bigcirc$).
2. Remove the seat (page 82).
3. Remove the clip (1), battery cover (2) and holder (3) by removing the mount bolts (4).
4. Disconnect the negative (-) terminal lead (5) from the battery (6) first, then disconnect the positive (+) terminal lead (7).
5. Remove the battery.

(cont'd)

Battery

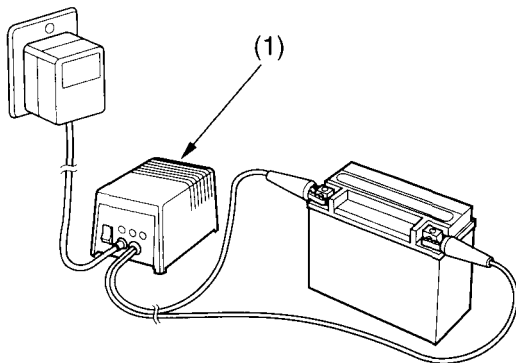
6. Charge the battery (see following section), unless you have been riding regularly.
7. Store your battery in an easy-to-reach location off the floor, in an area protected from freezing temperature and direct sunlight.
8. Clean the battery box after removing the battery for storage. Dry the battery box and, if paint is missing, re-paint the area.
9. Slow charge the battery (see following section) once every 30 days.

Installation

1. Install in the reverse order of removal.
2. Check all bolts and other fasteners are secure.

Battery Charging

Refer to *Safety Precautions* on page 71.



(1) “trickle” charger

Be sure to read the information that came with your battery charger and follow the instructions on the battery. Improper charging may damage the battery.

We recommend using a “trickle” charger (1) for home charging. These units can be left connected for long periods without risking damage to the battery. However, do not intentionally leave the charger connected longer than the time period recommended in the charger’s instructions.

Avoid using an automotive-type battery charger. An automotive charger can overheat an ATV battery and cause premature damage.

Appearance Care

Frequent cleaning and polishing will keep your Honda looking newer longer.

Frequent cleaning also identifies you as an owner who values his ATV. A clean ATV is also easier to inspect and service.

General Recommendations

Refer to *Safety Precautions* on page 71.

- To clean your ATV, you may use:
 - water
 - a mild, neutral detergent and water
 - a mild spray and wipe cleaner/polisher
 - a mild spray and rinse cleaner/degreaser and water
- Avoid products that contain harsh detergents or chemical solvents that could damage the metal, paint, and plastic on your ATV.
- If your ATV is still warm from recent operation, give the engine and exhaust system time to cool off.
- Park in a shady area. Washing your ATV in bright sunlight may cause the finish to fade because water droplets intensify the sun's brightness.
- Spotting is also more likely because surface water can dry before you have time to wipe it off.
- Clean your ATV regularly to protect surface finishes.
- We recommend the use of a garden hose to wash your ATV. High pressure washers (like those at coin-operated car washers) can damage certain parts of your ATV.

NOTICE

High pressure water (or air) can damage certain parts of your ATV.

- After cleaning, inspect for damage, wear, and leaks (fuel, oil, coolant, brake, and clutch fluid).

Appearance Care

Washing Your ATV with a Mild Detergent

Refer to *Safety Precautions* on page 71.

1. Rinse your ATV thoroughly with cool water to remove loose dirt.
 2. Fill a bucket with cool water. Mix in a mild, neutral detergent, such as dish washing liquid or a product made especially for washing motorcycles or automobiles.
 3. Wash your ATV with a sponge or soft towel. As you wash, check for heavy grime. If necessary, use a mild cleaner/degreaser to remove the grime.
 4. After washing, rinse your ATV thoroughly with plenty of clean water to remove any residue. Detergent residue can corrode alloy parts.
 5. Dry your ATV with a chamois or a soft towel. Leaving water on the surface to air dry can cause dulling and water spots. As you dry, inspect for chips and scratches.
 6. Start the engine and let it idle for several minutes. The engine heat will help dry moist areas.
 7. As a precaution, ride your ATV at a slow speed and apply the brakes several times. This will help dry the brakes and restore normal braking performance.
- If the inside of the headlight lens appears clouded immediately after washing, it should clear after a few minutes of riding.

Appearance Care

Spray Cleaning Your ATV

Refer to *Safety Precautions* on page 71.

Avoid using spray cleaner products on the tires or suspension components.

Suggestions for using spray cleaner(s) follow:

ATV condition	Recommended Cleaning
Dust and fingerprint smudges.	Apply a spray cleaner/polish and wipe paint, chrome, glass, and clear plastic.
Light road grimes.	Spray any difficult-to-reach or very dirty areas with a spray cleaner/degreaser. Rinse and dry. Apply a spray cleaner/polish and wipe with a non-abrasive cloth.
Heavy grime. Oil leaks. Brake dust.	Use a spray cleaner/degreaser. If necessary, rub with a sponge. Rinse and dry. Apply a spray cleaner/polish and wipe with a non-abrasive cloth.
Dull, corroded chrome or aluminum.	Apply a high quality chrome/aluminum polish and wipe with a non-abrasive cloth.

Appearance Care

Finishing Touches

Refer to *Safety Precautions* on page 71.

After washing your ATV, consider using a commercially-available spray cleaner/polish or quality liquid or paste wax to finish the job. Use only a non-abrasive polish or wax made specifically for motorcycles or automobiles. Apply the polish or wax according to the instructions on the container.

If a surface on your ATV is chipped or scratched, your Honda dealer has touch-up paint to match your ATV's color. Be sure to use your ATV's color code (page 175) when you buy touch-up paint.

If the frame has a chip that exposes the metal, first apply primer (to prevent corrosion) and then apply the touch-up paint. Several thin layers of touch-up paint are better than one thick coat.

Painted Aluminum Wheel Maintenance

Refer to *Safety Precautions* on page 71.

Aluminum may corrode from contact with dirt, mud, or road salt. Clean the wheels after riding through any of these substances. Use a wet sponge and mild detergent. Avoid stiff brushes, steel wool, or cleaners containing abrasives or chemical compounds.

After washing, rinse with plenty of water and dry with a clean cloth.

If the paint is chipped, apply touch-up paint.

Here's helpful advice on how to prepare for an off-road adventure, how to transport and store your Honda, and how to be an environmentally responsible ATV owner.

Preparing for a Ride	150
What to Take to The Riding Area	150
What to Take on The Trail	151
Transporting Your Honda	152
Storing Your Honda	154
You & the Environment	158

Preparing for a Ride

A safe and enjoyable ride begins with good planning and preparation. Always ride with at least one other person in case you have trouble, and let someone know where you're going and when you expect to return.

Before riding in an unfamiliar area, find out in advance if you need special permits, get maps so you can study the terrain, and talk to other riders who know the area. The Forest Service and the Bureau of Land Management (USA only), the Ministry of Natural Resources (Canada only), riding clubs, and off-road magazines are good sources of information.

What to Take to the Riding Area

Along with your ATV and riding gear, you should take along some tools and supplies in case you have a problem. For some of the difficulties you might encounter, see *Taking Care of the Unexpected*, which begins on page 159.

We recommend that you always take water, food, a first aid kit, and your owner's manual. Other items you should consider loading on your truck or trailer include:

- a tool kit
- tire repair supplies and tools, and tires
- extra parts, control levers, cables, and spark plugs
- wire, duct tape, and rope
- extra gasoline

For safety, all refueling should be done at a gas station on the way to the riding area or at your base camp.

Preparing for a Ride

What to Take on the Trail

What you take with you during a ride depends on the kind of terrain, how long you expect to ride, how far you might go from your base camp or help, and how experienced you or your companions are in making repairs.

If you decide to take some tools, spare parts, or other supplies on the trail, be sure you can carry them safely and know how to use them. Also, be sure to follow the loading guidelines and weight limit (page 32).

Transporting Your Honda

Do not tow your ATV behind a car or other vehicle.

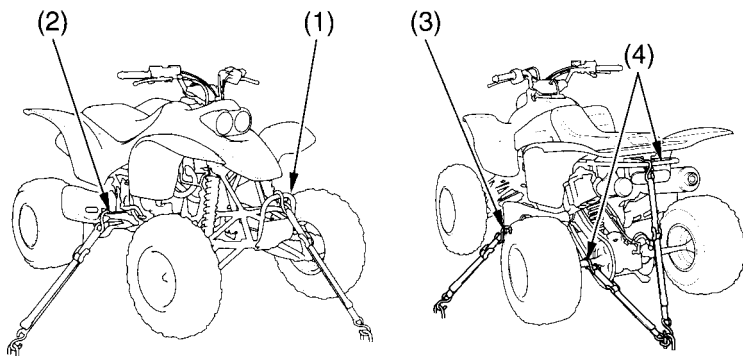
When you transport your ATV, we recommend that you carry the vehicle in its normal operating position (on all four wheels) and follow these procedures:

1. Set the parking brake and place the transmission in gear.
2. Turn the fuel valve OFF.
3. Secure the vehicle with “tie-down straps” in the areas shown.

Suitable “tie-down straps” are available from your Honda dealer.

Ordinary rope is not recommended because it can stretch under load.

Using tie-down straps in any other areas can damage your ATV.



- (1) front carry pipe
- (2) right footpeg
- (3) left footpeg
- (4) rear carry pipe or rear axle shaft

Transporting Your Honda

If it is necessary to incline your ATV upright on the rear end:

1. Follow steps 1 and 2 on the previous page.
2. Place a suitable container under the carburetor drain tube.
3. Turn the drain screw counterclockwise and drain the fuel from the carburetor.
4. After draining the carburetor, turn the drain screw clockwise until it is tight.
5. Pour the drained fuel into the fuel tank.
6. Tilt the vehicle and secure properly.

WARNING

Inclining this ATV without first draining fuel from the carburetor could cause the fuel to explode or ignite.

Always drain fuel from the carburetor before inclining this ATV. Always handle fuel in a well-ventilated area with the engine off. Do not smoke or allow flames or sparks in the area where fuel is handled. If any fuel is spilled, make sure the area is dry before starting the engine.

Storing Your Honda

Preparation for Storage

Refer to *Safety Precautions* on page 71.

This procedure requires a means for draining and disposing of drained fuel (page 158).

1. Change the engine oil and filter (page 91).
2. Fill the fuel tank. Make sure the fuel fill cap is properly installed.
3. Make sure the fuel valve is off.
4. Drain the carburetor into an approved gasoline container and dispose of it in an approved manner (page 158).

If storage will last longer than one month, carburetor draining is important, to assure proper performance after storage.

WARNING

Gasoline is highly flammable and explosive. You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks and flame away.
- Handle fuel only outdoors.
- Wipe up spills immediately.

Storing Your Honda

5. To prevent rusting in the cylinders, perform the following:
 - Remove the spark plug cap from the spark plug.
 - Remove the spark plug.
Do not connect the spark plug to the spark plug cap.
 - Pour a tablespoon (15 – 20 cc) of clean engine oil into cylinder and cover the spark plug hole with a piece of cloth.
 - With the engine stop switch in the OFF () position, press the start button several times to crank the engine and distribute the oil.
 - Reinstall the spark plug and spark plug cap.
6. Remove the battery and charge it fully. Store it in an area protected from freezing temperatures and direct sunlight. Slow charge the battery (page 143) once a month.

WARNING

The battery gives off explosive hydrogen gas during normal operation.

A spark or flame can cause the battery to explode with enough force to kill or seriously hurt you.

Wear protective clothing and a face shield, or have a skilled mechanic do the battery maintenance.

7. Wash and dry your ATV. Wax all painted surfaces.
8. Lubricate the drive chain (page 137).

Storing Your Honda

9. Inflate the tires to their recommended pressures (page 127).
10. Store your ATV in an unheated area, free of dampness, away from sunlight, with a minimum of daily temperature variation.
11. Place your ATV on blocks to lift both tires off the floor.
12. Cover your ATV with a porous material. Avoid using plastic or similar non-breathing, coated materials that restrict air flow and allow heat and moisture to accumulate.

Removal from Storage

Refer to *Safety Precautions* on page 71 .

1. Uncover and clean your ATV.
2. If your ATV has been stored for more than four months — change the engine oil (page 91).
3. If your ATV has been stored for more than two months — ask your Honda dealer to drain and replace the fuel.
4. Charge the battery (page 143) as required. Install the battery.
5. Lubricate the drive chain (page 137).
6. Perform a pre-ride inspection (page 29), then test-ride your ATV at low speeds.

Storing Your Honda

If you won't be riding for an extended period, such as during the winter, thoroughly inspect your ATV and correct any problem before storing it. That way, needed repairs won't be forgotten and it will be easier to get your ATV running again.

For more information about storage, refer to the *Honda Motorcycle Winter Storage Guide*, available from your Honda dealer (USA only).

We suggest you perform the following procedures to keep your ATV in top condition. These storage procedures will reduce the deterioration that can occur during storage.

You & the Environment

Owning and riding an ATV can be enjoyable, but you must do your part to protect nature. When you show respect for the land, wildlife, and other people, you also help preserve the sport of off-road riding.

Following are tips on how you can be an environmentally-responsible ATV owner.

- **Tread Lightly.** Stay on existing roads and trails, avoid surfaces that are easily damaged, and ride only in areas approved for off-road vehicles.
- **Keep the Noise Down.** Loud vehicles can be offensive. Ride as quietly as possible, don't remove your spark arrester, and don't modify the muffler or any other part of your air intake and exhaust systems. Such modifications not only increase noise, they also reduce engine performance and may be illegal.
- **Choose Sensible Cleaners.** Use a biodegradable detergent when you wash your ATV. Avoid aerosol spray cleaners that contain chlorofluorocarbons (CFCs) which damage the atmosphere's protective ozone layer. Don't throw cleaning solvents away; see the following guidelines for proper disposal.
- **Recycle Wastes.** It's illegal and thoughtless to put used engine oil in the trash, down a drain, or on the ground. Used oil, gasoline, and cleaning solvents contain poisons that can hurt refuse workers and contaminate our drinking water, lakes, rivers, and oceans. Before changing your oil, make sure you have the proper containers. Put oil and other toxic wastes in separate sealed containers and take them to a recycling center. Call your local or state office of public works or environmental services to find a recycling center in your area, and to get instructions on how to dispose of non-recyclable wastes.

Taking Care of the Unexpected

With all the challenges you can encounter off-road, there's a chance that sometime something may go wrong. This section gives practical advice to help you deal with a wide range of problems. Take time to read this section before you ride. Also review the tips in *Preparing for a Ride* (page 150).

General Guidelines.....	160
If Your Engine Quits or Won't Start.....	162
If You Have a Flat Tire	165
If a Fuse Blows	168
If You Crash.....	170
If You Lose Your Key	171
If a Component Fail	172

Taking Care of the Unexpected

General Guidelines

Keeping your ATV well-maintained is the best way to reduce the possibility of having a problem while riding. However, problems can arise even with well-maintained machines.

Remember to take along your owner's manual, the tool kit that came with your ATV, and any other items (such as tire repair supplies and additional tools) that might help you solve a problem on your own.

If something goes wrong during a ride, the first thing to do is stop as soon as you safely can. Do not continue riding if you have a flat tire, or you hear an unusual noise, or your ATV just doesn't feel right. If you continue riding, you could cause more damage and endanger your own safety.

After a stop, take time to assess the situation. Carefully inspect your ATV to identify the problem, then consider your options before you decide what to do.

If a problem is relatively minor and you have the tools, supplies, and skills to make a permanent repair, you may be able to fix it on the trail and continue riding. Or, you may be able to make a temporary repair that allows you to slowly ride back to your base where you can make a permanent repair or get help.

When a problem is more serious — or you don't have the tools, supplies, experience, or time to deal with it — you need to choose the safest way to get yourself and your ATV back to base. For example, if you are close enough, you (or you and another person) might be able to push it back.

Taking Care of the Unexpected

Should you ever have a problem while riding, please follow these guidelines:

- Always put personal safety first.
- Take time to assess the situation and your options before deciding what to do.
- If the problem is relatively minor and you have the tools, supplies, and skills to make a temporary repair, be sure to have permanent repairs made as soon as possible.
- Do not continue riding if you are hurt or your ATV is not in safe riding condition.

Additional recommendations for specific problems follow.

Proper operation and maintenance can prevent starting and engine performance problems. In many cases, the cause of the problem may be a simple operational oversight.

If you have a problem starting the engine — or experience poor engine performance — the following information may help you. If you can't correct the problem, see your Honda dealer.

If your ATV won't start, listen as you press the start button. If you don't hear the starter motor turning, refer to the *Starter motor doesn't operate* symptom. If you can hear the starter motor working normally, refer to the *Starter motor works, but the engine won't start* symptom.

If Your Engine Quits or Won't Start

Proper operation and maintenance can prevent starting and engine performance problems. In many cases, the cause of the problem may be a simple operational oversight.

If you have a problem starting the engine — or experience poor engine performance — the following information may help you. If you can't correct the problem, see your Honda dealer.

If your ATV won't start, listen as you press the start button. If you don't hear the starter motor turning, refer to the *Starter motor doesn't operate* symptom. If you can hear the starter motor working normally, refer to the *Starter motor works, but the engine won't start* symptom.

If Your Engine Quits or Won't Start

SYMPTOM: **Starter motor doesn't operate.**

POSSIBLE CAUSE	WHAT TO DO
ignition switch OFF	Turn the ignition switch ON.
engine stop switch OFF	Turn the engine stop switch to RUN.
transmission not in neutral	Shift into neutral.
blown fuse	Replace with a new fuse of the same rating (page 168).
battery lead loose	Tighten the battery lead. Charge the battery (page 143). If charging doesn't help, see your Honda dealer.
faulty starter motor	If all possible causes are negative, the starter motor may be faulty. See your Honda dealer.

SYMPTOM: **Starter motor works, but the engine won't start.**

POSSIBLE CAUSE	WHAT TO DO
out of fuel	Fill the fuel tank.
flooded engine	See <i>Flooded Engine</i> (page 49).
loose or unconnected spark plug cap	Install the spark plug cap securely. If the engine still won't start, see your Honda dealer.
loose battery cables	Tighten the battery terminal bolts.
weak battery	Charge the battery (page 143). If charging doesn't help, see your Honda dealer.

If Your Engine Quits or Won't Start

SYMPTOM: Engine starts, but runs poorly.	
POSSIBLE CAUSE	WHAT TO DO
idles roughly, too fast, stalls	Check engine idle adjustment (page 104). If the problem persists, see your Honda dealer.
poor engine performance at altitudes above 3,000 feet.	Ask your Honda dealer to modify the carburetion with a high altitude jet. Refer to <i>High Altitude Carburetor Adjustment</i> , page 181.
runs erratically, misfires	See your Honda dealer.
blubbers (rich fuel mixture)	See your Honda dealer.
sooty exhaust (rich fuel mixture)	See your Honda dealer.
detonates or pings under load	If applicable, switch to the recommended octane gasoline (page 83) or change your brand of gasoline. If the problem persists, see your Honda dealer.
afterfires (backfires)	See your Honda dealer.
pre-ignition (runs on after ignition switched OFF)	See your Honda dealer.

If You Have a Flat Tire

How you handle a flat tire on the trail depends on how serious the tire damage is, and what tools and supplies you have with you.

If you have a slow leak or a minor puncture, use the plug method to make a temporary repair. (The plug method is applied from the outside of the tire and is the same as that for conventional tubeless tires.)

A plug-type repair kit, available at most auto parts stores or service stations, provides a plug, an installation tool, tire cement, and an instruction sheet. Follow the instructions provided with the repair kit to make a temporary repair.

As soon as possible, have the tire permanently repaired by your Honda dealer. Any tire that cannot be repaired should be replaced.

Whenever the ATV is to be operated far from service facilities or available transportation, we recommend that you carry a tire pump and a repair kit with the vehicle.

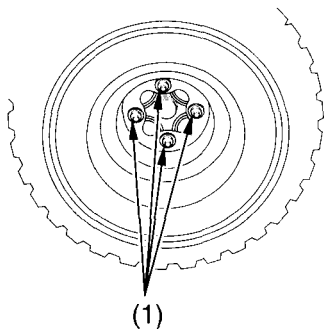
If the leak is more serious, or a temporary repair doesn't hold, the tire must be replaced. The tire will also need to be replaced if it is damaged (page 130). Replacing a tire involves removing and re-installing the wheel (page 166).

If you are unable to repair a flat tire on the trail, you will need to send for help. We strongly recommend that you do not try to ride with a flat tire. The ATV will be hard to handle, and if the tire comes off the rim, it may lock up the wheel and cause you to crash.

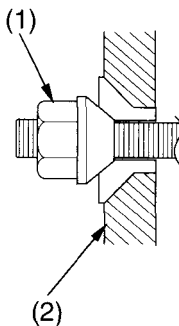
If You Have a Flat Tire

Emergency Wheel Removal/Installation

Refer to *Safety Precautions* on page 71.



(1) wheel nuts



(2) wheel rim

Removal

1. Park your ATV on a firm, level surface.
2. Raise the front (or rear) wheels off the ground and place a support block under the vehicle.
3. Remove the wheel nuts (1) with a 17 mm socket wrench.
4. Remove the wheel.

If You Have a Flat Tire

Installation

1. Position the wheel.
2. Position the wheel nuts so that the tapered sides face the wheel rim (2).
3. Tighten the wheel nuts in a crisscross (rather than a circular) pattern to the specified torque:
47 lbf·ft (64 N·m , 6.5 kgf·m)

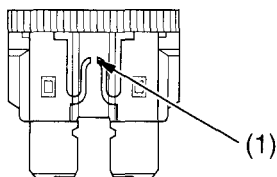
If a torque wrench was not used for installation, see your Honda dealer as soon as possible to verify proper assembly. Improper assembly may lead to loss of braking capability.

If a Fuse Blows

All of the electrical circuits on your ATV have fuse to protect them from damage caused by excess current flow (short circuit or overload).

If something electrical on your ATV stops working, the first thing you should check for is a blown fuse (1).

Check the fuse before looking elsewhere for another possible cause of the problem. Replace a blown fuse and check component operation.



(1) blown fuse

The fuse (2) is located on left of the battery behind the seat.

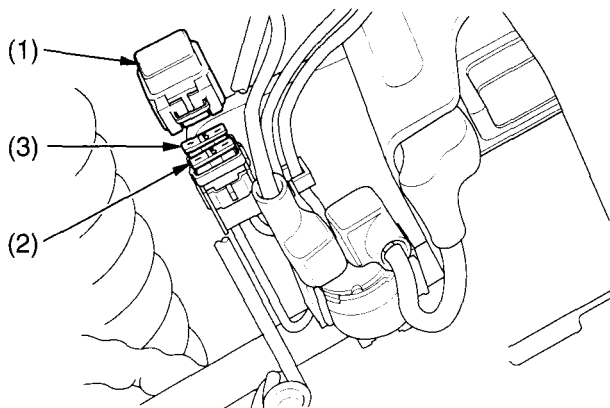
Recommended Fuse

main fuse	15A
-----------	-----

If a Fuse Blows

Main Fuse Access

1. To prevent an accidental short circuit, turn the ignition switch OFF (O) before checking or replacing the fuse.
2. Remove the seat (page 82).
3. Remove the fuse case cover (1).
4. To access the main fuse (2), remove the fuse case cover (1).



(1) fuse case cover
(2) main fuse

(3) spare fuse

5. Pull the main fuse out.
If it is blown, install the spare main fuse (3).
6. Reinstall the fuse case cover.
7. Install the seat.

If You Crash

Personal safety is your first priority after an accident. If you or anyone else has been injured, take time to assess the severity of the injuries and whether it is safe to continue riding. If you cannot ride safely, send someone for help. Do not ride if you will risk further injury.

If you decide you are capable of riding safely, carefully inspect your ATV for damage and determine if it is safe to ride. Check the tightness of critical nuts and bolts securing such parts as the handlebar, control levers, brakes, and wheels.

If there is minor damage, or you are unsure about possible damage but decide to try riding the ATV back to your base, ride slowly and cautiously.

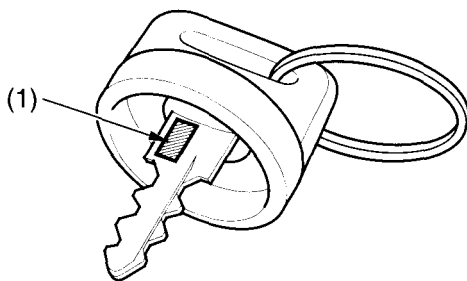
Sometimes, crash damage is hidden or not immediately apparent. When you get home, thoroughly check your ATV and correct any problems you find. Also, be sure to have your Honda dealer check the frame and suspension after any serious crash.

If You Lose Your Key

Be sure to record your key number (1) in the Quick Reference section at the rear of the manual. You'll need this number to have a duplicate key made.

If you lose your key and aren't carrying a duplicate, either get your spare or have one made. If you don't know your key number, call the dealer you purchased your Honda from. They may have it listed in their records. If they don't, transport your ATV to them or the nearest Honda dealer. The dealer will probably have to remove the ignition switch assembly to find the key number so they can make a key for you.

The key number (1) is stamped on the key.



(1) key number

If a Component Fails

The brake levers or pedal, control cables, and other components can be damaged as you ride in dense brush or over rocky terrain. Making a trailside repair depends on how serious the damage is and what tools and supplies you have with you.

- If any component of the brake system is damaged, you may be able to ride carefully back to your base using the other brake components for slowing or stopping.
- If you damage a throttle cable or other critical component, your ATV may be unsafe to ride. Carefully assess the damage and make any repairs that you can. But if there is any doubt, it's best to be conservative and safe.

Technical Information

This section contains dimensions, capacities, and other technical data, plus information on government requirements and how to break-in your ATV.

Vehicle Identification.....	174
Specifications.....	176
Break-in Guidelines	180
High Altitude Carburetor Adjustment.....	181
Emission Control Systems.....	182
Oxygenated Fuels.....	185

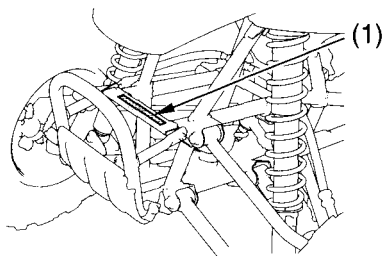
Vehicle Identification

Serial Numbers

The frame and engine serial numbers and key number may be required when ordering replacement parts. You may record these numbers in the Quick Reference section at the rear of this manual.

The frame number (1) is stamped on the front of the frame.

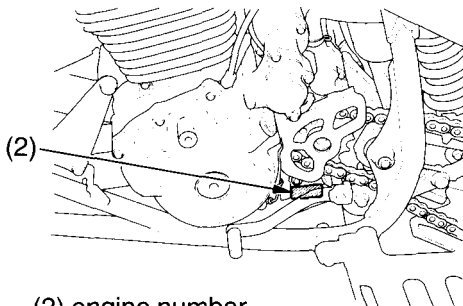
FRONT



(1) frame number

The engine number (2) is stamped on the left side of the crankcase.

LEFT SIDE



(2) engine number

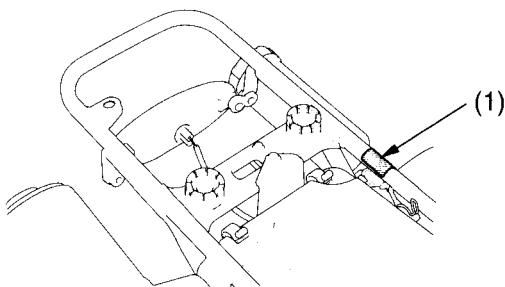
Vehicle Identification

Color Label & Code

The color label (1) is attached to the frame under the seat. Remove the seat (page 82) to check the label.

The color code is helpful when ordering replacement parts. You may record the color and code in the Quick Reference section at the rear of this manual.

UNDER SEAT



(1) color label

Specifications

Dimensions

overall length	72.2 in (1,835 mm)
overall width	45.3 in (1,150 mm)
overall height	43.7 in (1,110 mm)
wheelbase	48.4 in (1,230 mm)
ground clearance	4.3 in (110 mm)

Weight

dry weight	375 lbs (170 kg)
------------	------------------

Fuel & Lubricants

fuel recommendation	unleaded gasoline, pump octane number of 92 or higher
fuel tank capacity	2.64 US gal (10.0 ℓ) including reserve
fuel tank reserve	0.42 US gal (1.6 ℓ)
engine oil capacity	after disassembly: 2.3 US qt (2.2 ℓ) after draining: 1.8 US qt (1.7 ℓ)
engine oil recommendation	API Service Classification SG or higher except oils labeled as energy conserving on the circular API service label, SAE 10W-40, JASO T 903 standard MA, Pro Honda GN4 or HP4 (without molybdenum additives) 4-stroke oil (USA & Canada) or Honda 4-stroke oil (Canada only), or an equivalent motorcycle oil

Specifications

Capacities	
passenger capacity	operator only
maximum weight capacity	243 lbs (110 kg) rider, all cargo and accessories

Engine Specifications	
displacement	24.23 cu-in (397.2 cm ³)
bore & stroke	3.35 × 2.76 in (85.0 × 70.0 mm)
compression ratio	9.1 : 1
spark plug (standard)	DPR8Z (NGK) or X24GPR-U (DENSO)
spark plug (high speed riding)	DPR9Z (NGK) or X27GPR-U (DENSO)
valve clearance (cold)	Intake 0.004 in (0.10 mm) Exhaust 0.005 in (0.12 mm)
spark plug gap	0.024 – 0.028 in (0.60 – 0.70 mm)
idle speed	1,400 ± 100 rpm

Power Transmission	
primary reduction	2.826
gear ratio, 1st	2.917
2nd	1.938
3rd	1.474
4th	1.182
5th	1.000
final drive	chain DID520V6 or RK520 SMOZ10S

Specifications

Chassis & Suspension	
caster	6.5°
trail	1.1 in (28 mm)
tire size, front	AT 22 × 7-10 ★★
tire size, rear	AT 20 × 10-9 ★★
tire pressure, front & rear (cold)	Front: 4.0 psi (27 kPa , 0.275 kgf/cm ²) Rear: 4.0 psi (27 kPa , 0.275 kgf/cm ²)
maximum tire pressure, front & rear (cold)	Front: 4.6 psi (31 kPa , 0.315 kgf/cm ²) Rear: 4.6 psi (31 kPa , 0.315 kgf/cm ²)
minimum tire pressure, front & rear (cold)	Front: 3.4 psi (23 kPa , 0.235 kgf/cm ²) Rear: 3.4 psi (23 kPa , 0.235 kgf/cm ²)

Electrical	
battery	12V — 8Ah
generator	0.147 kW/5,000 rpm

Lights	
headlight (Low/High)	12V 30/30W × 2
tail light	12V 5W
neutral indicator	12V 3.4W

Specifications

Fuse	
main	15A

Torque Specification	
oil tank drain bolt	14 lbf·ft (20 N·m , 2.0 kgf·m)
crankcase drain bolt	18 lbf·ft (25 N·m , 2.5 kgf·m)
oil filter bolt	7 lbf·ft (10 N·m , 1.0 kgf·m)
wheel nuts	47 lbf·ft (64 N·m , 6.5 kgf·m)

Break-in Guidelines

Help assure your ATV's future reliability and performance by paying extra attention to how you ride during the first operating day or 15 miles (25 km).

During this period, avoid full-throttle starts and rapid acceleration.

High Altitude Carburetor Adjustment

Your engine's air-fuel mixture becomes overly rich when operated at high altitudes. Above 3,000 feet (1,000 m), a rich mixture can cause driveability problems, reduce engine performance, and increase fuel consumption. To compensate, you can have the carburetor adjusted for high altitude riding. See your Honda dealer.

A high altitude jet is available to compensate for high altitude richness. For those who are mechanically proficient and have the necessary tools, installation and adjustment procedures are given in the official Honda Service Manual available from your Honda dealer. All others should have this carburetor modification performed by a Honda dealer.

However, the carburetor must be returned to standard factory specifications before riding again at lower altitudes (below 5,000 feet, 1,500 m).

Sustained riding at lower altitudes with the lean high-altitude setting may cause rough idling, stalling, or engine damage from overheating.

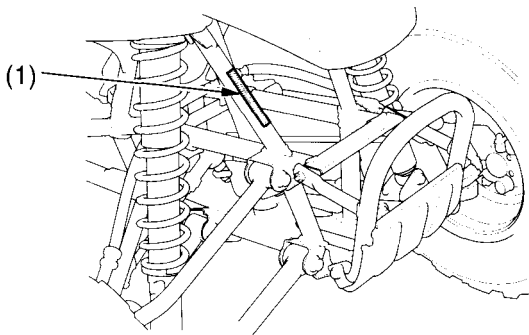
Emission Control Systems

Exhaust Emission Requirements

The California Air Resources Board (CARB) requires that your ATV comply with applicable exhaust emissions standards during its useful life, when operated and maintained according to the instructions provided.

The Vehicle Emission Control Information Label (1) is attached on the right side of the frame.

FRONT



(1) vehicle emission control information label

Emission Control Systems

Source of Exhaust Emissions

The combustion process produces carbon monoxide (CO), oxides of nitrogen (NO_x), and hydrocarbons (HC). Control of hydrocarbons and oxides of nitrogen is very important because, under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but it is toxic.

Honda Motor Co., Ltd. utilizes lean carburetor settings and other systems to reduce carbon monoxide and hydrocarbons.

Exhaust Emission Control System

The exhaust emission control system consists of lean carburetor settings, and no adjustment should be made except idle speed adjustment with the throttle stop screw. The exhaust emission control system is separate from the crankcase emission control system.

Crankcase Emission Control System

The engine is equipped with a closed crankcase system to prevent discharging crankcase emissions into the atmosphere. Blow-by gas is returned to the combustion chamber through the air cleaner and the carburetor.

Problems That May Affect ATV Exhaust Emissions

If you are aware of any of the following symptoms, have the vehicle inspected and repaired by your Honda ATV dealer.

Symptoms:

1. Hard starting or stalling after starting
2. Rough idle
3. Misfiring or backfiring during acceleration
4. After-burning (backfiring)
5. Poor performance (driveability) and poor fuel economy

Emission Control Systems

Noise Emission Control System

TAMPERING WITH THE NOISE CONTROL SYSTEM IS PROHIBITED:

State laws prohibit, or Canadian provincial laws may prohibit the following acts or the causing thereof: (1) The removal or rendering inoperative by any person, other than for purposes of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE FOLLOWING ACTS:

1. Removal of, or puncturing the muffler, baffles, header pipes or any other component which conducts exhaust gases.
2. Removal of, or puncturing of any part of the intake system.
3. Lack of proper maintenance.
4. Replacing any moving parts of the vehicle, or parts of the exhaust or intake system, with parts other than those specified by the manufacturer.

Oxygenated Fuels

Some conventional gasolines are being blended with alcohol or an ether compound. These gasolines are collectively referred to as oxygenated fuels. To meet clean air standards, some areas of the United States and Canada use oxygenated fuels to help reduce emissions.

If you use an oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirement.

Before using an oxygenated fuel, try to confirm the fuel's contents.

Some states/provinces require this information to be posted on the pump.

The following are the EPA-approved percentages of oxygenates:

ETHANOL (ethyl or grain alcohol) 10% by volume

You may use gasoline containing up to 10% ethanol by volume.

Gasoline containing ethanol may be marketed under the name "Gasohol".

MTBE (Methyl Tertiary Butyl Ether) 15% by Volume

You may use gasoline containing up to 15% MTBE by volume.

METHANOL (methyl or wood alcohol) 5% by Volume

You may use gasoline containing methanol containing up to 5%

methanol by volume as long as it also contains cosolvents and corrosion inhibitors to protect the fuel system. Gasoline containing more than 5% methanol by volume may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of your fuel system.

Oxygenated Fuels

If you notice any undesirable operating symptoms, try another service station or switch to another brand of gasoline.

Fuel system damage or performance problems resulting from the use of an oxygenated fuel containing more than the percentages of oxygenates mentioned above are not covered under warranty.

Oxygenated fuels can damage paint and plastic. Be careful not to spill fuel when filling the fuel tank. Wipe up any spills immediately.

NOTICE

Oxygenated fuels can damage paint and plastic. Damage caused by spilled fuel is not covered by warranty.

Table of Contents

The following presents the contents of each section of your owner's manual.

ATV SAFETY	1
Important Safety Information	2
Safety Labels.....	5
 INDICATORS & CONTROLS.....	 9
Component Locations	11
Indicators.....	14
Neutral Indicator Lamp	14

(cont'd)

Table of Contents

Controls & Features	
Fuel Valve	15
Choke Lever.....	16
Ignition Switch	17
Start Button	18
Engine Stop Switch.....	18
Headlight Switch.....	19
Headlight Dimmer Switch.....	19
Throttle Lever	20
Clutch Lever.....	20
Front Brake Lever	21
Rear Brake Pedal.....	21
Parking Brake.....	21
Flag Pole Bracket	22
BEFORE RIDING	23
Are You Ready to Ride ?	24
Protective Apparel.....	24
Rider Training	26
Age Recommendation.....	27
No passengers	27
No Alcohol or Drugs.....	28
Is Your ATV Ready to Ride ?.....	29
Pre-ride Inspection	29
Load Limits & Guideline	32
Loading	32
Accessories & Modifications	35
Accessories.....	35
Modifications	36

Table of Contents

BASIC OPERATION & RIDING	37
Safe Riding Precautions	39
Off-Road Use Only	39
Keeps Hands and Feet on Controls	40
Control Speed	41
Use care on Unfamiliar or Rough Terrain	42
Do Not Perform Stunts	43
Starting & Stopping the Engine	44
Preparation	45
Starting Procedure	46
Flooded Engine	49
How to Stop the Engine	49
Shifting Gears	50
Braking	52
Riding Your ATV	54
Making Turns	54
Skidding or Sliding	56
Riding Up Hills	57
Riding Down Hills	61
Crossing or Turning on Hills or Slopes	62
Riding Over Obstacles	64
Riding Through Water	65
Parking	66

Table of Contents

SERVICING YOUR HONDA.....	67
<i>Before You Service Your Honda</i>	
The Importance of Maintenance	69
Maintenance Safety.....	70
Important Safety Precautions	71
Maintenance Schedule	72
Maintenance Record.....	76
 <i>Service Preparations</i>	
Component Locations	77
Tool Kit.....	80
Owner's Manual Storage.....	81
Seat Removal	82
 <i>Service Procedures</i>	
<u>Fluids & Filters</u>	
Fuel	83
Engine oil & Filter	86
Air Cleaner	94
 <u>Engine</u>	
Throttle Lever	98
Clutch System	100
Engine Idle Speed	104
Spark Plug	105
Valves.....	108
Spark Arrester	109

(cont'd)

Table of Contents

Chassis

Suspension	111
Brakes.....	117
Tires	125
Engine Guard & Skid Plates.....	132
Drive Chain	133

Electrical

Battery	139
---------------	-----

Appearance Care	144
-----------------------	-----

TIPS..... 149

Preparing for a Ride	150
Transporting Your Honda	152
Storing Your Honda	154
You & the Environment.....	158

TAKING CARE OF THE UNEXPECTED..... 159

General Guidelines.....	160
If Your Engine Quits or Won't Start.....	162
If You Have a Flat Tire	165
If a Fuse Blows	168
If You Crash.....	170
If You Lose Your Key	171
If a Component Fail	172

Table of Contents

TECHNICAL INFORMATION.....	173
Vehicle Identification.....	174
Specifications.....	176
Break-in Guidelines	180
High Altitude Carburetor Adjustment.....	181
Emission Control Systems.....	182
Oxygenated Fuels.....	185
 CONSUMER INFORMATION.....	 187
Authorized Manuals	188
Warranty Coverage	191
Warranty Service.....	192
Contacting Honda	193
Your Honda Dealer	194
The Honda Rider's Club (USA only).....	195
 TABLE OF CONTENTS.....	 196
 INDEX.....	 202
 QUICK REFERENCE	

Index

A

accessories.....	35
age recommendation	27
air cleaner,	
filter.....	95
housing drain tube	97
air pressure,	
gauge.....	80
tire	125
altitude,high.....	181
American Honda, contacting.....	193
apparel, protective	24
appearance care	144
authorized manuals.....	188

B

Battery.....	139
Brakes,	
fluid.....	117
front brake lever.....	21
parking, brake.....	21
adjustment, parking, brake	123
rear brake pedal.....	21
pad wear	121
braking	52
break-in guidelines	180

C

capacity, fuel	84
carburetor, altitude adjustment	181
care, appearance	144
chain,drive	133
choke, lever.....	16
cleaning, appearance care.....	144
climbing hills.....	59
clutch system, adjustment	101
lever.....	20
color label.....	175
compartment, owner's manual	81
tool kit	80
component fails.....	172
component locations, indicator	14
maintenance	77
consumer information	187
crash, if you.....	170
crossing or turning on hills or slops	61
customer service.....	191

Index

D

damping, suspension,	
rear	114
dimmer switch, headlight	19
dipstick	89
drive chain.....	133

E

emission control system	182
engine	
flooded	48
guard	132
idle speed.....	104
number	174
oil	87
pinging	83
starting.....	44
stop switch.....	18
stopping.....	48
won't start	162
environment	158
exhaust system	
cleaning	30
purging	109

F

flag pole bracket.....	22
flat tire	165
flooded engine.....	48
frame number	174
fuel,	
fill cap	84
high altitude fuel mixture adjustment.....	181
oxygenated	185
recommendation	83
refueling	84
reserve fuel supply	15
tank capacity	84
valve.....	15
fuse.....	168

Index

G

gap, spark plug	105
gasohol	184
gasoline	83
gear shifting	50

H

headlight dimmer switch	19
headlight switch	19
high altitude carburetor adjustment	181
hills,	
crossing or turning on slopes	62
riding down hills	61
riding up hills	57
stopping on hills	59
Honda,	
contacting	193
Rider's Club	195
dealer	194
Honda service manual	188

I

identification, vehicle.....	174
idle speed, engine	104
ignition switch.....	17
indicators	14
neutral indicator lamp.....	14
inspection, pre-ride.....	29

K

key,	
lost.....	171
number	171
kit, tool	80

Index

L

labels, safety.....	5
lamp check	14
limit, weight	33
load limits.....	33
loading guidelines	34
location, components,	
indicators.....	14
maintenance	14
lubrication	
engine oil.....	87
drive chain.....	133

M

maintenance,	
importance.....	69
precautions	71
record	76
safety	70
schedule.....	72
manual, service.....	188
maximum weight limit	33
modifications.....	36

N

neutral indicator lamp.....	14
noise emission control systems	184
numbers, serial	174

O

obstacles, riding over	64
oil,	
engine	87
operating controls.....	44
owner's manual storage.....	81
oxygenated fuels	185

Index

P

parking	66
passenger, no carrying.....	27
pavement, no riding on.....	39
pinging, engine.....	83
plugs, spark	106
pre-load, suspension	
front.....	112
pre-ride inspection.....	29
problems, unexpected.....	160
protective apparel	24

R

removal, seat	82
rider training.....	26
Rider's Club, Honda.....	195
riding,	
basic operations.....	37
clothing.....	24
precautions	39
preparing for	23
over obstacles	63
safety	2
safety precautions.....	39
through water	65

S

safety,	
important precautions	71
labels	5
riding precautions.....	39
schedule, maintenance.....	72
seat removal	82
serial numbers	174
service,	
customer	191
manuals	188
warranty	192

(cont'd)

Index

shifting gears.....	49
skid plates.....	132
skidding or sliding.....	56
spark arrester.....	109
spark knock.....	83
spark plug.....	105
specifications.....	176
stalling on a hill.....	59
start button.....	18
starting,	
engine.....	44
troubleshooting.....	162
stop switch, engine.....	18
stopping engine.....	48
storage,	
ATV.....	154
owner's manual.....	81
suspension,	
front suspension adjustment.....	112
front suspension pre-load.....	112
rear suspension adjustment.....	114
rear suspension damping.....	114
switch,	
headlight.....	19
headlight dimmer.....	19
ignition.....	17

T

throttle,	
cable	98
lever.....	20
tires,	
air pressure	126
flat	165
replacing	131
repairing	130
specifications.....	127,178
thread conditions	126
tool kit	80
training, rider.....	26
transporting your ATV	152
trouble, unexpected	159
troubleshooting, starting	162
turning,	
on level ground.....	53
on hills or slopes.....	62

V

valve, fuel.....	15
valve clearance	108

Index

W

warning labels	5
warranty,	
coverage	191
extended	191
service	192
washing your ATV	145
water,	
riding through.....	65
weight limit	33
wheel removal	166

Quick Reference

The following is a brief, but important collection of information you need to know about your Honda. You'll also find space to record important notes.

How To Avoid Costly Repairs

The engine of your Honda can be the most expensive component to repair. Proper maintenance, especially the use of the recommended fluids and filters, prevents premature wear and damage.

Frequent causes of costly repairs are:

- Engine oil: insufficient quantity, improper oil.
- Air cleaner: dirty, leaking because of improper installation (poor seal).

Record important information on the following page:

Quick Reference

Engine No.	
Frame No.	
Ignition Key No.	
Color Label	
Owner's Name	
Address	
City/State	
Phone	
Dealer's Name	
Address	
City/State	
Phone	
Service Mgr.	

Quick Reference

Scheduled Maintenance	Initial: 100 miles (150 km) Regular: every 600 miles (1,000 km)
Pre-ride Inspection	Check the following items each time before you ride (page 29): engine oil, fuel, tires, drive chain, nuts & bolts, underbody & exhaust system, air cleaner housing drain tube, leaks, loose parts, cables, throttle, brakes, clutch lever, indicators, lights, switches, steering.
Fuel/Capacity	unleaded gasoline, pump octane number of 92 or higher 2.64 US gal (10.0 l) reserve: 0.42 US gal (1.6 l)
Engine Oil	API Service Classification SG or higher except oils labeled as energy conserving on the circular API service label, SAE 10W-40, JASO T 903 standard MA, Pro Honda GN4 or HP4 (without molybdenum additives) 4-stroke oil or equivalent
Maximum Weight Capacity	243 lbs (110 kg) rider, all cargo and accessories

Quick Reference

Tires	Front: AT 22 × 7-10 ★★ Rear: AT 20 × 10-9 ★★
Tire Pressure (cold)	Front: 4.0 psi (27 kPa , 0.275 kgf/cm ²) Rear: 4.0 psi (27 kPa , 0.275 kgf/cm ²) maximum tire pressure: Front: 4.6 psi (31 kPa , 0.315 kgf/cm ²) Rear: 4.6 psi (31 kPa , 0.315 kgf/cm ²) minimum tire pressure: Front: 3.4 psi (23 kPa , 0.235 kgf/cm ²) Rear: 3.4 psi (23 kPa , 0.235 kgf/cm ²)
Spark Plugs	standard: DPR8Z (NGK) or X24GPR-U (DENSO) high speed riding: or DPR9Z (NGK) X27GPR-U (DENSO)
Fuse	main: 15A

HONDA

The power of dreams.™

⚠ WARNING

Improper use of ATVs can result in SEVERE INJURY or DEATH



**ALWAYS USE
AN APPROVED
HELMET AND
PROTECTIVE
GEAR**



**NEVER USE
ON PUBLIC
ROADS**



**NEVER CARRY
PASSENGERS**



**NEVER USE
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.

READ THE OWNER'S MANUAL

FOLLOW ALL INSTRUCTIONS AND WARNINGS.