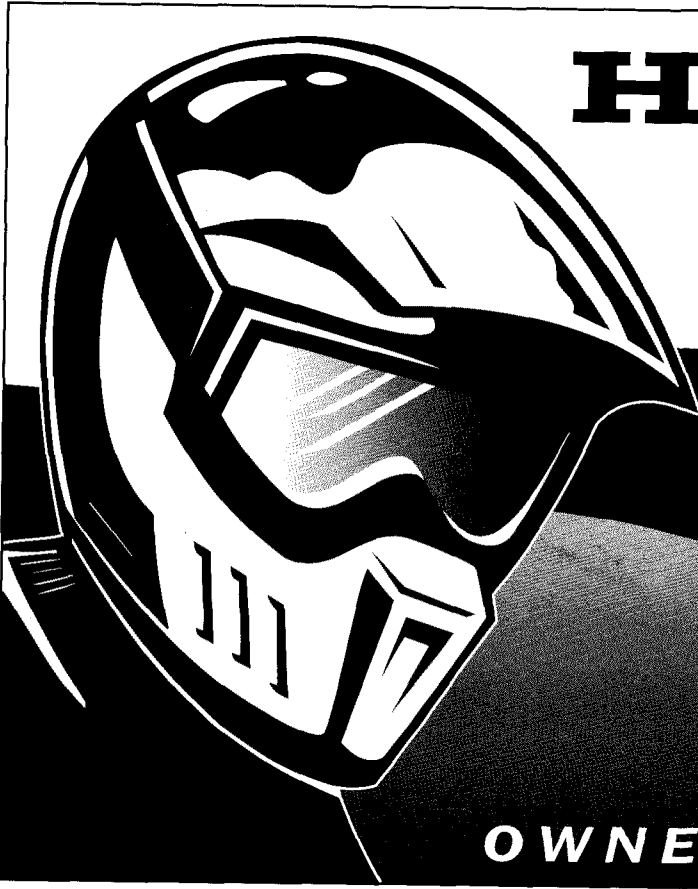




HONDA

XR100R

95
OWNER'S MANUAL

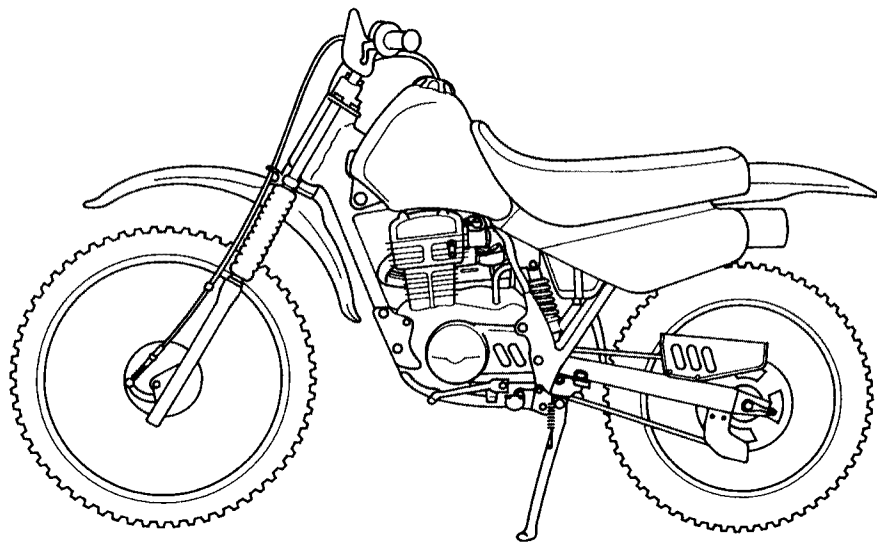
This manual should be considered a permanent part of the motorcycle and should remain with the motorcycle when it is resold.

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**1995
HONDA XR100R
OWNER'S MANUAL**



Safety Messages

Your safety, and the safety of others, is very important. We have provided important safety messages in this manual and on your motorcycle. Please read these messages carefully.

A safety message alerts you to potential hazards that can hurt you and others. Each safety message is preceded by a safety alert symbol  and one of three words: **DANGER**, **WARNING**, or **CAUTION**.

 **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.

Each message tells you what the hazard is, what can happen, and what you can do to avoid or reduce injury.

Safety Messages

Damage Prevention Messages

You will also see other important messages that are preceded by the word:
NOTICE.

NOTICE

*Your motorcycle or other property can be damaged if
you don't follow instructions.*

The purpose of these messages is to help prevent damage to your Honda, other property, or the environment.

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.

Introduction

Motorcycle Safety 1

Important safety information, a special message for parents, precautions about loading, accessories, and modifications, and the location of safety labels.

Operating Controls 13

The location, function, and operation of the throttle, brakes, clutch, and other basic controls.

Before Riding 21

The importance of wearing a helmet and other protective gear, plus how to make sure you and your motorcycle are ready to ride.

Riding 27

How to start and stop the engine, shift gears, and brake. Also, break-in guidelines and riding precautions.

Maintenance 39

Why your motorcycle needs regular maintenance, what you need to know before servicing your Honda, a maintenance schedule, and instructions for specific maintenance items.

Contents

Helpful Tips & Suggestions . 107

How to transport and store your motorcycle, and how to be an environmentally-responsible rider.

Taking Care of Unexpected Problems 117

What to do if you have a flat tire, your engine won't start, etc.

Technical & Consumer Information 125

ID numbers, technical specifications, and other technical facts. Also, information on warranties, noise controls, and how to get Honda service manuals.

Index 142

Quick Reference

Handy facts about fuel, engine oil, tire sizes, and air pressures.

Introduction

Congratulations on choosing an XR100R off-road motorcycle.

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 motorcycle for off-road use by one rider only. It's an ideal bike for younger, beginning riders, but one that is also suitable for many adult riders.

To get the best performance and longest life from your Honda, give special attention to maintenance. That's why you need to inspect your motorcycle carefully before every ride

and perform all recommended maintenance. When you need special service, repairs, or assistance, your Honda dealer has the know-how and commitment to keep your motorcycle going strong. To protect your engine, follow the break-in procedures.

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

Before riding, take time to get to know your motorcycle and how it works. Start by reading this manual. It's full of facts, instructions, safety information, and tips that will help you get the most enjoyment from your Honda.

Each section of this manual begins with a detailed list of topics in that section. You'll also find an Index at the back of the manual.

If you have any questions, you'll find your Honda dealer knows your motorcycle best and is dedicated to your complete satisfaction.

Happy riding!



Motorcycle Safety

This section discusses some of the most important safety information. It also includes a special message for parents, advice about accessories and modifications, and location information for the safety labels on your motorcycle.

Important Safety Information	2
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Loading, Accessories & Modifications	8
Loading	8
Accessories & Modifications	10
Safety Labels	12

Important Safety Information

Your motorcycle can provide many years of service and pleasure — if you take responsibility for your own safety and understand the challenges you can meet off-road.

This motorcycle has been designed for younger riders, as well as for smaller adults. However, not all youngsters are physically or emotionally ready to ride. Therefore, before parents allow any youngster to ride this motorcycle, we urge them to carefully read the *Important Message to Parents* beginning on page 5 and the *Parents, Youngsters and Off-Highway Motorcycles* booklet that came with the motorcycle (USA only).

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.

Always Wear a Helmet

It's a proven fact: helmets significantly reduce the number and severity of head injuries, so don't ride without one. We also recommend that you wear eye protection, sturdy boots, gloves and other protective gear (page 22)

Never Carry a Passenger

Your motorcycle 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

Important Safety Information

your balance and control of the motorcycle.

Ride Off-Road Only

Your motorcycle is designed and manufactured for off-road use only. The tires are not made for pavement, and the motorcycle 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 motorcycle across.

Take Time to Learn and Practice

Developing off-road riding skills is a gradual, step-by-step process. Start by practicing at low speeds in a safe area and slowly build your skills. Personal instruction from an experienced rider can also be valuable.

If you need assistance, call the Motorcycle Safety Foundation (800 447-4700) or ask your dealer about riding groups in your area (USA only).

Also be sure to read the *Tips & Practice Guide for the Off-Highway Motorcyclist* booklet that came with your motorcycle (USA only).

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 motorcycle 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 judgements and ride safely.

Keep Your Honda in Safe Condition

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

Important Message To Parents

Your child's safety is very important to Honda. That's why we urge you to read this message before you let any young person ride this motorcycle. Off-road riding can be fun. But, as with riding a bicycle, bad judgement can result in injury, and we don't want that to happen! As a parent, you can help prevent accidents by making good decisions about if, when, and how your youngster rides this motorcycle.

Riding Readiness

The first decision you'll need to make is whether your youngster is ready to ride. Riding readiness varies widely from one person to another, and age and size are not the only factors.

PHYSICAL ABILITY is an important consideration. For example, riders must be big enough to hold the motorcycle up, get on, and comfortably sit on the seat with both feet touching the ground. They should also be able to easily reach and work the brakes, throttle, and all other controls.

ATHLETIC ABILITY is necessary for riding a motorcycle. Generally speaking, your youngster should be good at riding a bicycle before getting on a motorcycle. Can your youngster judge speeds and distances while riding a bicycle and react with proper hand and foot actions? Anyone who does not have good coordination, balance, and agility is not ready to ride this motorcycle.

Important Message To Parents

MENTAL AND EMOTIONAL MATURITY are requirements for safe riding. Does your youngster think through problems and come to logical solutions? On a bicycle, does your youngster obey safe riding rules? Be honest! Young people who take unnecessary risks, make bad judgements, and don't obey rules are not ready to ride this motorcycle.

Instruction and Supervision

If you decide that your youngster is ready to safely operate this motorcycle, make sure both of you carefully read and understand the owner's manual before riding. Also be sure that your youngster has a helmet and other appropriate riding equipment and

always wears it when operating the vehicle or sitting on it.

GOOD INSTRUCTION is an important part of hands-on training. The teacher can either be you or another responsible adult who has experience with off-road motorcycle riding. (For help in finding a qualified instructor, talk with your Honda dealer.) Even if you're not the main teacher, it's up to you to ensure your youngster's safety. Remember, learning to ride a motorcycle is a gradual, step-by-step process. It takes time, patience, and practice — many hours over a period of weeks or months.

Important Message To Parents

SUPERVISION is another important obligation of parents. Even after youngsters have become skilled off-road riders, they should always ride with adult supervision. It helps to regularly remind young riders of basic safety rules and precautions. And remember, it's your responsibility to see that the motorcycle is properly maintained and kept in safe operating condition.

SAFE AND RESPONSIBLE RIDING must be an on-going commitment — by you and your youngster. When you both put safety first, you can enjoy more peace of mind, and your youngster can enjoy more hours of safe off-road riding.

Loading, Accessories & Modifications

Your Honda was designed as a rider-only motorcycle. 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 motorcycle.

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

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

Loading

How much weight you put on your motorcycle, 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 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.

Loading, Accessories & Modifications

Load Limits

Following are the load limits for your motorcycle:

Maximum weight capacity = 100 kg (220 lb). Includes the weight of the rider and any accessories.

Loading Guidelines

As discussed on page 8, we recommend that you **do not** carry any cargo on this motorcycle. However, if you decide to carry cargo, ride at reduced speeds and follow these common-sense guidelines:

- Keep cargo small and light. Make sure it cannot easily be caught on brush or other objects, and that it does not interfere with your ability to

shift position to maintain balance and stability.

- Place weight as close to the center of the motorcycle as possible.
- Do not attach large or heavy items (such as a sleeping bag or tent) to the handlebar, fork, or front fender.
- Make sure that all cargo is tied down securely.
- Never exceed the maximum weight limit.
- Check that both tires are inflated properly.

Loading, Accessories & Modifications

Accessories & Modifications

Modifying your motorcycle or using non-Honda accessories can make your motorcycle unsafe. Before you consider making any modifications or adding an accessory, be sure to read the following information.

WARNING

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

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

Accessories

We strongly recommend that you use only genuine Honda accessories that have been specifically designed and tested for your motorcycle. 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 dealer for assistance and always follow this guideline:

- Make sure the accessory does not reduce ground clearance and lean angle, limit suspension travel or steering travel, alter your riding position, or interfere with operating any controls.

Loading, Accessories & Modifications

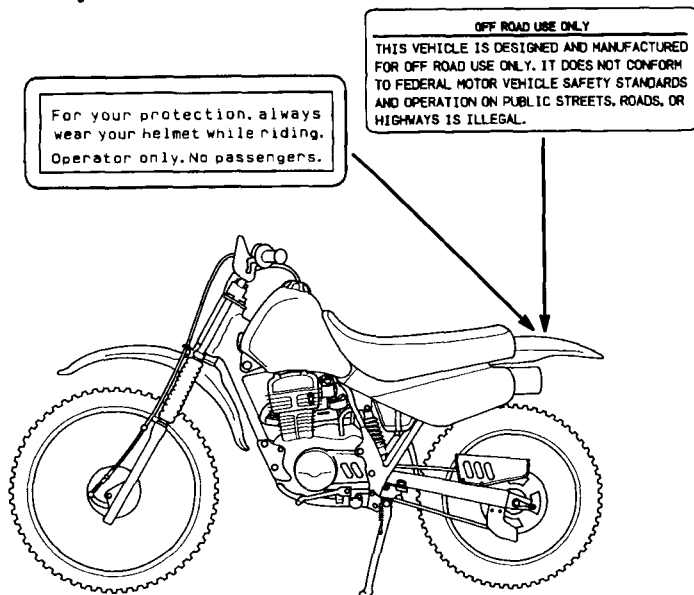
Modifications

We strongly advise you not to remove any original equipment or modify your motorcycle in any way that would change its design or operation. Such changes could seriously impair your motorcycle'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) that would make the motorcycle illegal in your area.

Safety Labels

**Read these SAFETY LABELS
before you ride!**

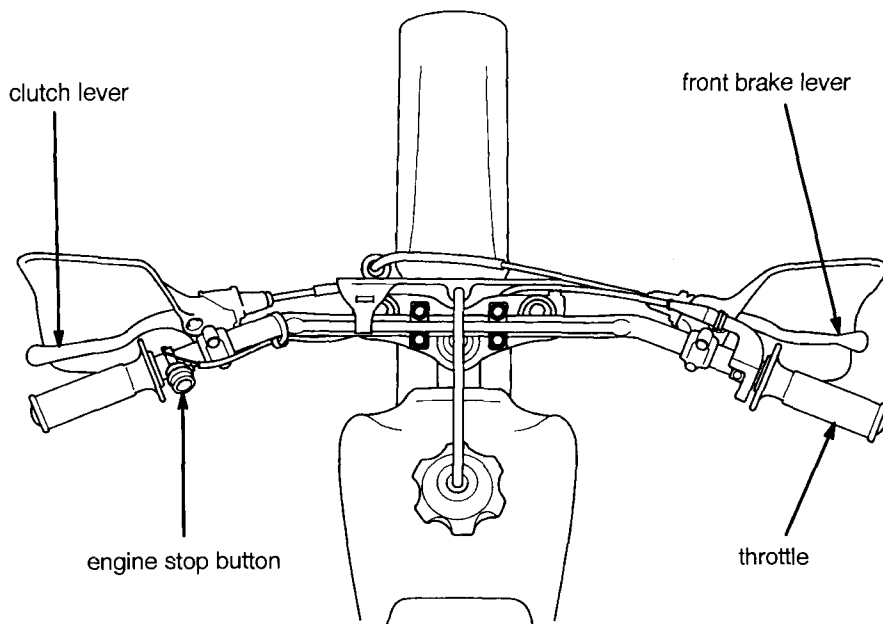


Operating Controls

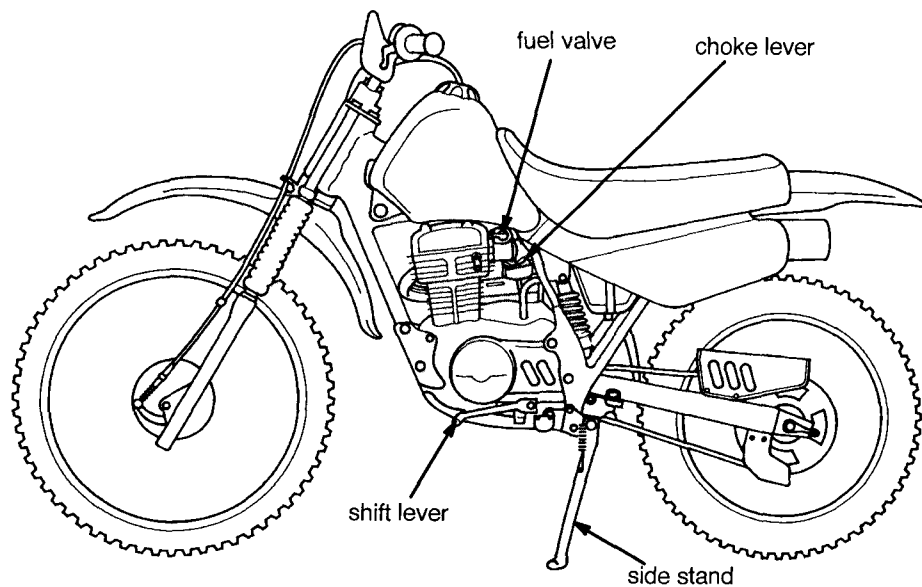
When you ride off-road, you need to operate the throttle, clutch, brakes, and other controls without stopping to look at them. Read this section carefully before you ride. It describes the location, function, and operation of all the basic controls on your motorcycle.

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Clutch Lever	19
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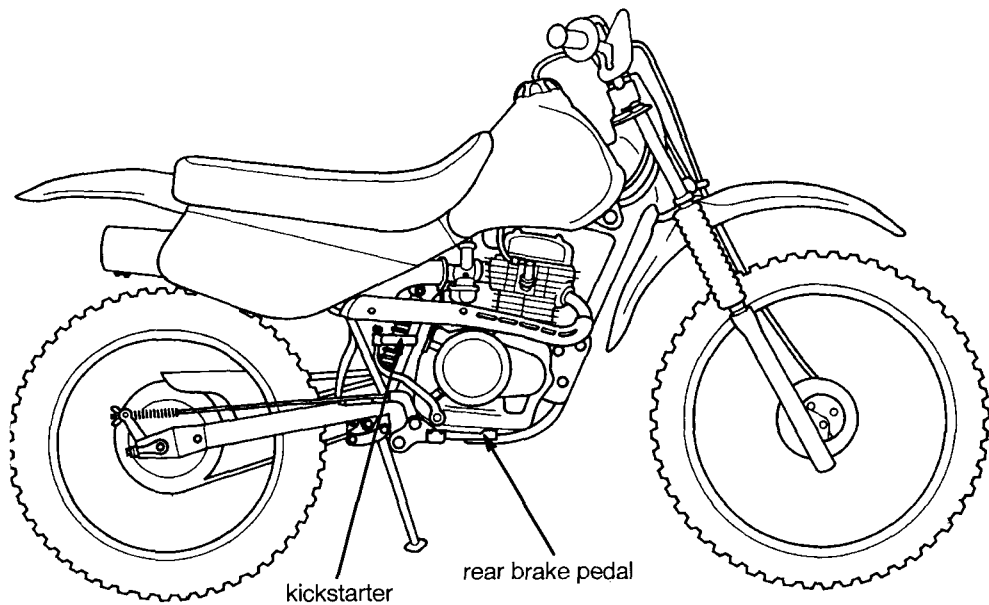
Operating Controls



Operating Controls

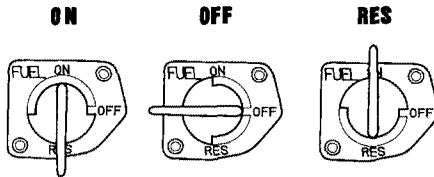


Operating Controls



Operating Controls

Fuel Valve



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

ON

Turning the fuel valve ON before attempting to start the engine allows fuel to flow from the fuel tank to the carburetor.

OFF

Turning the fuel valve OFF after stopping the engine prevents the flow of fuel from the fuel tank to the carburetor.

RES

Turning the fuel valve to RES allows fuel to flow from the reserve fuel supply to the carburetor.

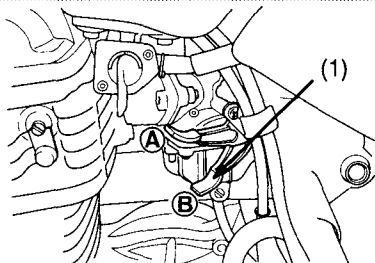
Operating Controls

The reserve fuel supply is:

0.9 ℓ (0.24 US gal, 0.20 Imp gal)

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.

Choke Lever



(1) choke lever

(A) Fully ON
(B) Fully OFF

The choke lever, used for starting the engine (page 30), increases the amount of fuel in the fuel/air mixture delivered to the engine.

ON

Used to start a cold engine with air temperature below 35°C (95°F).

OFF

Used for normal operation, for restarting a warm engine, or starting a cold engine with air temperature above 35°C (95°F).

Operating Controls

Engine Stop Button

The engine stop button is used to turn the engine off during normal riding situations. To operate, push the button in and hold it in until the engine stops completely.

Front Brake Lever

The front brake lever is used to slow or stop your motorcycle. To operate, pull the lever. For information on braking techniques, see page 35.

Throttle

The throttle controls engine rpm (speed). To increase engine rpm, rotate the grip toward you. To reduce engine

rpm, rotate the grip away from you. The throttle will automatically return to the closed position (engine idle) when you remove your hand.

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.

Operating Controls

Shift Lever

The shift lever is used to select the next higher or lower gear in the transmission. To operate, raise the shift lever (after pulling in the clutch lever) to engage the next higher gear or depress the shift lever to engage the next lower gear. See *Shifting Gears*, page 34.

Rear Brake Pedal

The rear brake pedal is used to slow or stop your motorcycle. To operate, depress the pedal. For information on braking techniques, see page 35.

Kickstarter

The kickstarter is used to start the engine. To operate, swing the kickstarter out from its stored position and depress it through its entire stroke. See *Starting the Engine* on page 30.

Side Stand

The side stand is used to support your motorcycle while parked (page 36). To operate, use your foot to lower the stand. Before riding, raise the stand.

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, and how to perform the recommended pre-ride inspection of your Honda. If you're a parent, be sure you also read the *Important Message To Parents* on page 5.

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Protective Apparel	22
Is Your Motorcycle Ready to Ride?	24
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Are You Ready to Ride?

Before every ride, always take a few moments to evaluate your riding readiness. Following are a few of the most important questions you should ask. While this list is not complete, it can help you decide whether you are really fit and ready to ride.

- Have you read this manual?
- Do you understand all the safety messages?
- Do you know how to operate all the controls?
- Are you free of alcohol and drugs?
- Do you feel well and in good physical and mental condition?
- Are you wearing a proper helmet, eye protection, and other protective clothes?

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 jersey, shirt, or jacket whenever you ride. Although complete protection is not possible, wearing the proper gear can reduce the chance of injury when you ride. Following are suggestions to help you choose the proper gear.

Are You Ready to Ride?

WARNING

Not wearing a helmet increases the chance of serious injury or death in a crash.

Be sure you always wear a helmet, eye protection and other protective apparel when you ride.

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 have a chin strap that can be tightened securely.

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.

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.

Is Your Motorcycle Ready to Ride?

For your safety, it's important to inspect your motorcycle before each ride and make sure any problem you find is corrected. A pre-ride inspection is a must, because off-road riding can be tough on a motorcycle and you don't want to have a breakdown far from help.

WARNING

Improperly maintaining this motorcycle 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.

Note to Parents:

If a youngster will be performing any of the following pre-ride inspection procedures, it's your responsibility to provide careful supervision and make sure they are performed safely.

Pre-ride Inspection

Check the following items **before** you get on the motorcycle:

<i>Tires</i>	Use a gauge to check the air pressure. Adjust if needed. Also look for signs of damage or excessive wear (page 91).
<i>Spokes & Rims</i>	Make sure the spokes and rim locks are tight. Also check the rims for damage (page 86).
<i>Leaks</i>	Look under the motorcycle for signs of leaking fluids.
<i>Engine Oil</i>	Check the level and add oil if needed (page 58).

<i>Fuel</i>	Check the level and add fuel if needed. Also make sure the fuel fill cap is securely fastened.
<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 96).
<i>Cables</i>	Check the cable housings for wear. Check the fittings for looseness. Replace or tighten as needed.
<i>Nuts & Bolts</i>	Use a wrench to make sure all accessible nuts, bolts, and fasteners are tight.

Pre-ride Inspection

Check these items **after** you get on the motorcycle:

- | | |
|-----------------|--|
| Throttle | Check the freeplay and adjust if needed. Rotate the throttle to make sure it moves smoothly without sticking, and snaps shut automatically when it is released, in all steering positions (page 65). |
| Brakes | Squeeze the front brake lever and step on the rear brake pedal to check that the controls operate normally (page 80). |
| Clutch
Lever | Check for smooth operation and adjust if needed (page 67). |

This section gives basic information on how to begin riding your motorcycle. It includes how to start and stop your engine, how to use the throttle, clutch, and brakes, and what to do when you're through riding.

For more advanced information — how to make turns, ride on hills, etc., see the *Tips & Practice Guide for the Off-Highway Motorcyclist* booklet that came with your Honda (USA only).

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Riding

Riding Precautions

Before riding your motorcycle for the first time, please review the *Important Safety Information* beginning on page 2 and the previous section, titled *Before Riding*.

Even if you have ridden other off-road motorcycles, take time to become familiar with how this motorcycle works and practice in a safe area until you build up your skills.

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

Your motorcycle is not equipped with lights. Do not ride at night.

Break-in Guidelines

To protect your new engine and enjoy optimum performance and service life:

- During the first 20 hours or 200 miles (350 km) of riding, avoid full-throttle operation, do not operate at any one speed for a prolonged period, and never lug the engine.
- Perform all maintenance required at the end of the break-in period (pages 47-48).

High Altitude Riding

If your riding area is above 4,000 feet (1,200 m), you should have your carburetor adjusted before riding (page 136). See your Honda dealer.

Starting The Engine

Preparation

Make sure the transmission is in neutral. Turn the fuel valve ON.

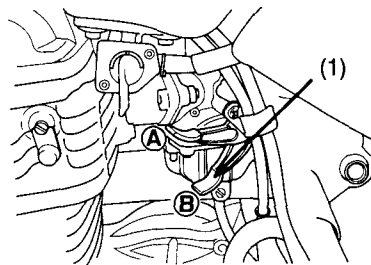
Your motorcycle may be kickstarted with the transmission in gear by pulling in the clutch lever before operating the kickstarter.

Starting Procedure

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

Normal Air Temperature

10°– 35°C (50°– 95°F)



(1) choke lever

(A) Fully ON

(B) Fully OFF

1. Pull the choke lever (1) up all the way to fully ON (A).

Starting The Engine

2. With the throttle slightly open, operate the kickstarter. Kick from the top of the stroke through to the bottom with a rapid, continuous motion.

NOTICE

Allowing the kickstarter to snap back freely against the pedal stop can damage the engine case.

3. Warm up the engine by opening and closing the throttle slightly.
4. About a quarter-minute after the engine starts, push the choke lever down all the way to fully OFF (B).
5. If idling is unstable, open the throttle slightly.

High Air Temperature

35° C (95° F) or above

1. Do not use the choke.
2. Start the engine following step 2 under *Normal Air Temperature*.

Low Air Temperature

10° C (50° F) or below

1. Follow steps 1-2 under *Normal Air Temperature*.
2. Warm up the engine by opening and closing the throttle slightly.
3. Continue warming up the engine until it runs smoothly and responds to the throttle when the choke lever is at fully OFF (B).

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

Starting 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. Push the choke lever down all the way to OFF.
2. Open the throttle fully.
3. While pushing the engine stop button, crank the engine several times with the kickstarter.
4. Release the engine stop button.
5. Follow the *High Air Temperature* starting procedure (page 31).

Starting from a Stop

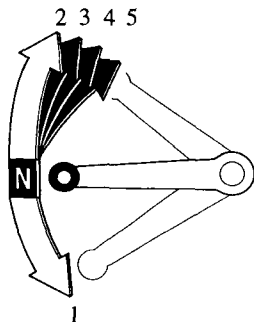
After the engine has been warmed and the side stand raised, your motorcycle is ready to ride. With the throttle closed and the front brake on:

1. Pull the clutch lever all the way in.
- 2 Depress the shift lever from neutral to first gear.
3. Release the front brake, then gradually open the throttle while you slowly release the clutch lever.
If engine speed is too low when you release the clutch lever, the engine will stall. If engine speed is too high or you release the clutch lever too quickly, the motorcycle may lurch forward.
4. When you attain a moderate speed, close the throttle, pull the clutch

lever in, and raise the shift lever from first to second gear. After shifting, open the throttle and release the clutch lever altogether.

5. Repeat step 4 to continue shifting up to higher gears.

Shifting Gears



Your motorcycle has five forward gears. To upshift, raise the shift lever. To downshift, depress the shift lever. The shift lever automatically returns to the horizontal position when released. Remember to close the throttle and pull the clutch lever in completely before

shifting. Failure to do so can damage the transmission.

Learning when to shift gears comes with experience. Upshift to a higher gear or reduce throttle before engine speed (rpm) gets too high. Downshift to a lower gear before you feel the engine laboring (lugging) at low rpm.

Downshifting also allows you to use engine braking (compression) to help slow the motorcycle. However, be careful not to downshift when engine speed is near maximum or you can over-rev (exceed maximum rpm) and damage the engine.

To prevent transmission damage, do not coast or tow the motorcycle for long distances with the engine off.

Braking

For normal braking, apply the front and rear brakes together. Gradually increase braking pressure as you feel the brakes slowing your speed.

Applying the brakes too hard may cause the wheels to lock, and you can start sliding out. If this happens, release the brakes, 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. A quick closing of the throttle or any braking during a turn may cause one or both wheels to slip.

When you brake to a stop, pull the clutch lever in before stopping completely to prevent stalling the

engine. For support, put your left foot on the ground first, then your right foot when you're through braking.

Stopping the Engine & Parking

To stop the engine, shift into neutral, push the engine stop button in, and hold it in until the engine stops.

Lower the side stand to support your motorcycle. If you're through riding for the day, also turn the fuel valve OFF. Always choose a level place to park.

Post-ride Inspection

When you return home after riding, thoroughly clean your motorcycle and remove any dirt, mud, brush, rocks or other objects you may have picked up along the way.

After cleaning, carefully inspect your motorcycle for leaks or damage.

Be sure to lubricate the drive chain (page 100) to prevent rusting.

Maintenance

Keeping your motorcycle well maintained is absolutely essential to your safety. It's also the best way to protect your investment, get maximum performance, avoid breakdowns, and have more fun. To help keep your motorcycle in tip-top shape, this section includes a Maintenance Schedule for required servicing 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.

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The Importance of Maintenance

A well-maintained motorcycle is essential for safe, economical, and trouble-free riding. Careful pre-ride inspections and good maintenance are especially important because your motorcycle is designed to be ridden over rough off-road terrain.

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

More frequent service is needed if you subject your motorcycle to severe use (such as competition) or ride in unusually wet or dusty areas. Frequent servicing of the air cleaner is especially

important to help you avoid a possible costly engine repair.

If your motorcycle 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.

Remember, proper maintenance is the owner's responsibility. Be sure to inspect your motorcycle before each ride and follow the Maintenance Schedule in this section.

The Importance of Maintenance

WARNING

Improperly maintaining this motorcycle 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.

Note to Parents:

As a parent, it's up to you to make sure that this motorcycle is properly maintained and kept in safe operating condition. For youngsters, learning how to take care of a motorcycle and perform basic maintenance can be an important part of their riding experience. However, if you allow a youngster to perform or assist in any maintenance task, such as filling the tank with gasoline, you should provide close supervision to make sure that it is handled safely.

Maintenance Safety

The maintenance section includes instructions on how to perform some important maintenance tasks. 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.

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 motorcycle parts.** Let the engine and exhaust system cool before touching.

Maintenance Safety

- **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 help prevent the motorcycle from falling over, park it on a firm, level surface, using the side stand or a maintenance stand to provide support.
- To reduce the possibility of a fire or explosion, be careful when working around gasoline. Use only a non-flammable (high flash point) solvent such as kerosene — not gasoline — to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.

Maintenance Schedule

To maintain the safety and reliability of your motorcycle, regular inspection and service is required as shown in the Maintenance Schedule that follows.

The Maintenance Schedule lists items that can be performed with basic mechanical skills and hand tools. Procedures for these items are provided in this manual.

The Maintenance Schedule also includes items that involve more extensive procedures and may require special training, tools, and equipment. Therefore, we recommend that you have your Honda dealer perform these tasks unless you have advanced mechanical skills and the required tools. Procedures for items in this schedule are provided in a service

manual available for purchase from your dealer (page 137).

Because your motorcycle does not have an odometer, service intervals in the maintenance schedules are expressed in terms of riding days as well as miles. To avoid overlooking required service, we urge you to develop a convenient way to record the number of days and/or miles you ride.

If you do not feel capable of performing a given task or need assistance, remember that your Honda dealer knows your motorcycle 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

Maintenance Schedule

replacement to ensure the best quality and reliability.

Perform the pre-ride inspection (page 25) 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 the owner has the proper tools and service data and is mechanically qualified. Refer to the official Honda Service Manual (page 141).

** In the interest of safety, we recommend these items be serviced only by your Honda dealer.

Summary of Maintenance Schedule Notes and Procedures:

NOTE: (1) Service more frequently when ridden in wet or dusty conditions.

Maintenance Procedures:

- I: inspect and clean, adjust, lubricate, or replace, if necessary
- C: clean
- A: adjust
- L: lubricate
- R: replace

Maintenance Schedule

Item		Break-in Maint.	Regular Maint. Interval	Note:	Refer to page:
*	Fuel Line		I		—
**	Fuel Strainer Screen		C		—
*	Throttle Operation		I		65
	Air Cleaner		C	Note 1	62
	Spark Plug		I		74
*	Valve Clearance	I	I		—
	Engine Oil	R	R		57
**	Engine Oil Strainer Screen		C		—
*	Cam Chain Tension	A	A		—
*	Engine Idle Speed	I	I		71
	Drive Chain	I, L	***	Note 1	96

*** every 10 operating days, about 300 miles (500 km): I, L

Maintenance Schedule

Item		Break-in Maint.	Regular Maint. Interval	Note:	Refer to page:
	Drive Chain Slider	I	I		97
	Brake Shoe Wear		I		83
	Brake System	I	I		80
	Clutch System	I	I		67
	Side Stand		I		95
*	Suspension		I		77
*	Spark Arrester		C		76
*	Nuts, Bolts, Fasteners	I	I		—
**	Wheels/Tires	I	I		86, 91
**	Steering Head Bearings	I	I		—

Break-in Maintenance: first week of operation, about 200 miles (350 km).

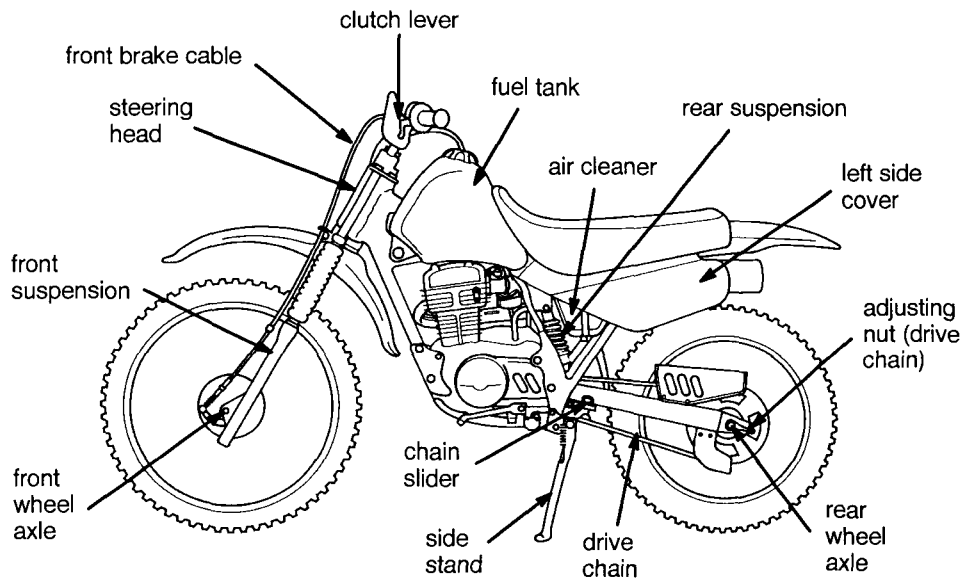
Regular Maintenance: every 30 riding days, about 1,000 miles (1,600 km).

Maintenance Record

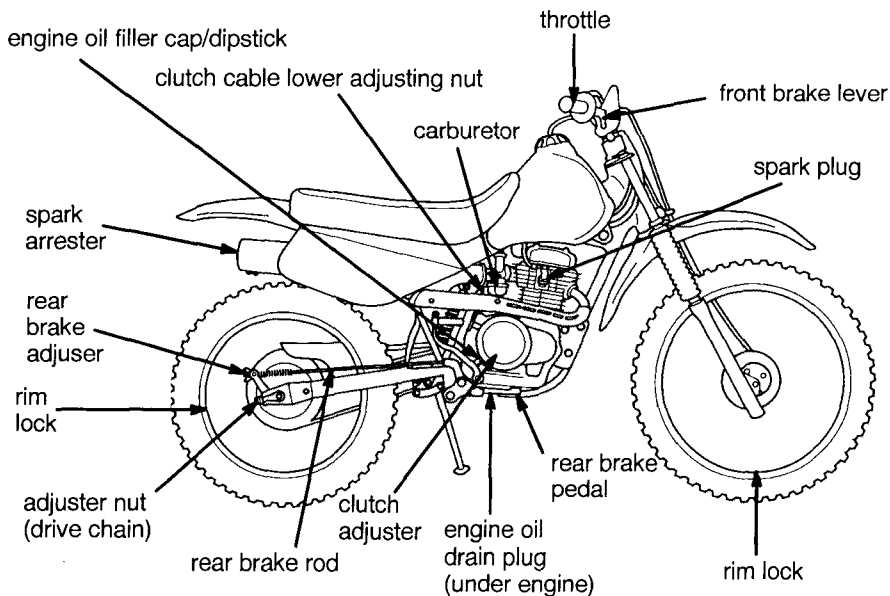
Keeping an accurate maintenance record will help ensure that your motorcycle is properly maintained. Use the space under Notes to record anything you want to remind yourself about or mention to your dealer. Of course, if you find any problem while servicing your motorcycle, be sure it is corrected as soon as possible.

Riding days	Date	Performed By:	Notes
30			
60			
90			
120			
150			
180			
210			
240			
270			

Component Locations



Component Locations



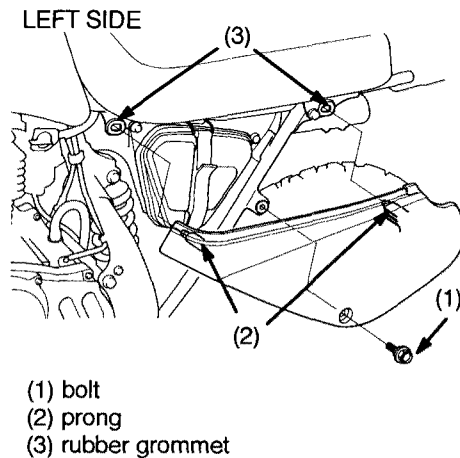
Tools

The spark plug wrench and handle (in a tool bag) were delivered with your motorcycle.

You will need to provide your own tools to perform any owner maintenance other than removing the spark plug.

Side Cover Removal

Refer to *Safety Precautions* on page 43.



Removal

1. Use a screwdriver to remove the (slot head) bolt (1).
2. Pull both side cover prongs (2) out of the rubber grommets (3).

Installation

1. Slide the top of the side cover under the bottom edge of the seat.
2. Align the side cover prongs with the rubber grommets. Press the side cover into position.
3. Install the securing bolt and tighten it.

Fuel

Refer to *Safety Precautions* on page 43.

WARNING

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

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

Fuel Recommendation

Type	unleaded
Pump Octane Number	86 (or higher)

Your engine is designed to use any gasoline that has a pump octane number of 86 or higher. Gasoline pumps at service stations normally display the pump octane number.

Use of lower octane gasoline can cause persistent “pinging” or “spark knock” (a louder 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.

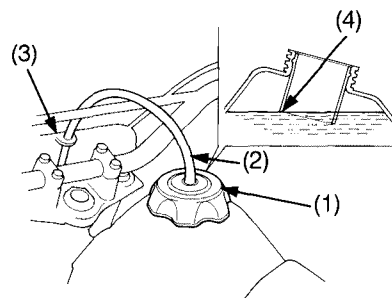
We recommend that you use unleaded fuel because it produces fewer engine deposits and extends the life of exhaust system components.

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

Refueling Procedure

Fuel Tank Capacity, including reserve:
6.5 ℓ (1.72 US gal, 1.43 Imp gal)

Reserve Capacity:
0.9 ℓ (0.24 US gal, 0.20 Imp gal)



- (1) fuel fill cap
- (2) breather tube
- (3) front number plate
- (4) filler neck

Fuel

1. To open the fuel fill cap (1), pull the breather tube (2) away from the front number plate (3). Turn the fuel fill cap counterclockwise and remove it.
2. Add fuel until the level reaches the bottom of the filler neck (4). Avoid overfilling the tank. There should be no fuel in the filler neck.
3. After refueling, turn the fuel fill cap clockwise until it is secure.
4. Check that the breather tube is properly seated in the front number plate.

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

Refer to *Safety Precautions* on page 43.

Using the proper oil, 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 held 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.

Oil Recommendation

API Classification	SF or SG
Viscosity (weight)	SAE 10W-40*
Suggested Oil	Pro Honda GN4 or HP4 4-stroke oil, or equivalent**

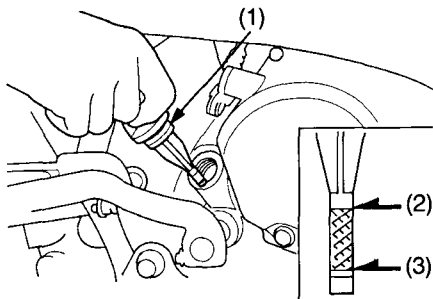
* For normal air temperatures. See page 61 for additional temperature/viscosity information.

** Use oil manufactured specifically for motorcycles.

Engine Oil

Checking & Adding Oil

RIGHT SIDE



- (1) oil filler cap/dipstick
- (2) upper level mark
- (3) lower level mark

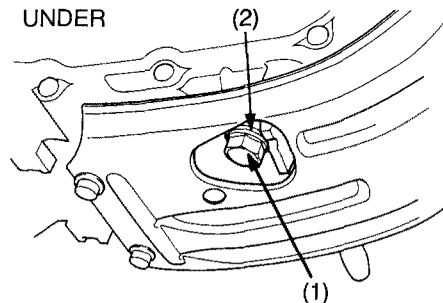
1. Start the engine and let it idle for a few minutes. Stop the engine. Wait a few minutes.

- 2. Park your motorcycle on level ground.
- 3. Clean the oil filler cap (1) and nearby surfaces.
- 4. Unscrew and remove the oil filler cap/dipstick. Wipe it clean.
- 5. Hold the motorcycle upright.
- 6. Insert the dipstick until it seats, but don't screw it in. Remove the dipstick.

Engine Oil

7. Check the oil level on the dipstick.
 - If the oil is at or near the upper level mark (2), you don't have to add oil.
 - If the oil is below or near the lower level mark (3), add the recommended oil until it reaches the upper level mark. (Do not overfill.)
8. Insert the dipstick and screw it in tightly.
9. Check for oil leaks.

Changing Engine Oil



- (1) oil drain bolt
(2) sealing washer

1. If the engine is cold, start it and let it idle for 3–5 minutes. Turn the engine off. Wait 2–3 minutes for the oil to settle.

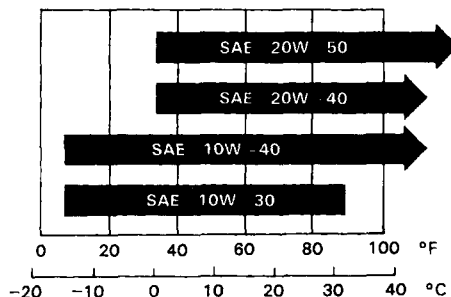
Engine Oil

2. Park the motorcycle on level ground. Place a drain pan under the crankcase oil drain bolt (1).
3. Remove the oil filler cap/dipstick.
4. Unscrew and remove the oil drain plug.
5. After most of the oil is drained, gently tilt the motorcycle from side to side to drain the remaining oil.
Pour the drained oil into a suitable container and dispose of it in an approved manner (page 114).
6. Remove the old sealing washer (2) and install a new sealing washer on the drain plug. Insert the oil drain plug into the crankcase and tighten it to the specified torque.
25 N·m (2.5 kg-m, 18 ft-lbs)
7. Pour the recommended oil into the crankcase, approximately:
0.9 ℓ (1.0 US qt, 0.8 Imp qt)
8. Install the oil filler cap/dipstick securely.
9. Start the engine. Let it idle 2–3 minutes, then turn it off.
10. With the motorcycle held upright on level ground, check the oil level. If needed, add oil (page 58) until it reaches the upper level mark. (Do not overfill.)
11. Check for oil leaks.

Engine Oil

More About: Engine Oil

- When you buy oil, check the label to make sure it matches the recommendation.
- Your motorcycle does not need any oil additives. Use the recommended oil.
- Other viscosities shown in the following chart may be used when the average temperature in your riding area is within the indicated range.



Air Cleaner

Refer to *Safety Precautions* on page 43.

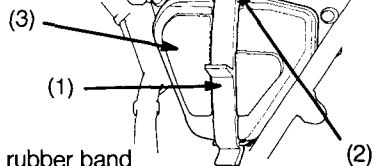
Proper air cleaner maintenance is very important for off-road vehicles. A dirty, water-soaked, worn-out, or defective air cleaner may allow dirt, dust, mud, and other impurities to pass into the engine.

NOTICE

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

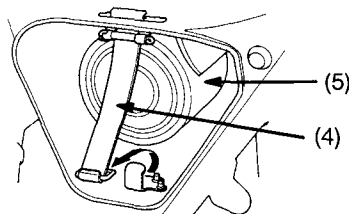
Cleaning

LEFT
SIDE



- (1) rubber band
- (2) hooks
- (3) air cleaner housing cover

LEFT SIDE



- (4) retainer
- (5) air cleaner

Air Cleaner

1. Remove the left side cover (page 53).
2. Remove the rubber band (1) from the hooks (2) and remove the air cleaner housing cover (3).
3. Unhook the retainer (4) and remove the air cleaner assembly (5).
4. Remove the air cleaner (foam) from the metal air cleaner body. Wipe the body clean.
5. 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.
6. Inspect for tears or cracks in the foam or seams of the air cleaner. Replace the air cleaner if it is damaged.
7. Allow the air cleaner to **dry thoroughly** before applying oil. A wet air cleaner will not fully absorb the oil.
8. Pour Pro 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.)

Air Cleaner

9. Attach the air cleaner to its metal body.
10. Clean the inside of the air cleaner housing.
11. Apply a thin coat of grease to the sealing surface of the air cleaner assembly.
12. Install the air cleaner assembly.
13. Install the air cleaner housing cover.
14. Install the left side cover.

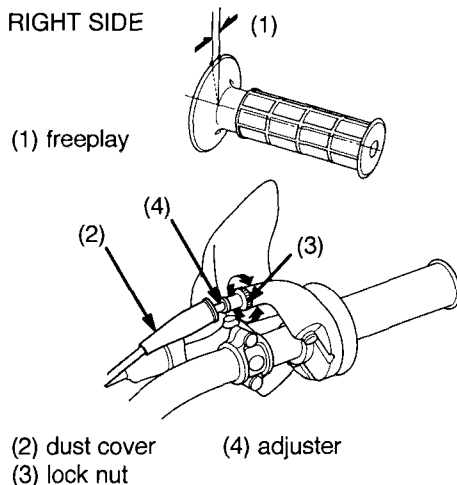
More About: Air Cleaner

- 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.
- Use the Honda genuine air cleaner specified for your model. Other air cleaners not specified for your model may not filter impurities properly and may cause premature engine wear or performance problems.

Refer to *Safety Precautions* on page 43.

Throttle Freeplay

RIGHT SIDE



Inspection

Check freeplay (1).

Freeplay: 2–6 mm (1/12 – 1/4 in)

If necessary, adjust to the specified range.

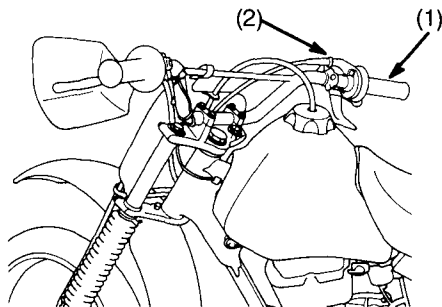
Adjustment

1. Pull the rubber dust cover (2) back.
2. Loosen the lock nut (3) on the throttle cable mechanism.
3. Turn the adjuster (4).
4. Tighten the lock nut. Return the dust cover to its normal position
5. After adjustment, check for smooth rotation of the throttle grip from fully closed to fully open in all steering positions.

Throttle

If you can't get the freeplay within the specified range, contact your Honda dealer.

Throttle Inspection



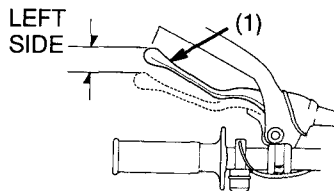
(1) throttle
(2) throttle cable

1. Check that the throttle assembly is positioned properly and the securing bolts are tight.
2. Check for smooth rotation of the throttle (1) 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 cable (2) from the throttle grip down to the carburetor. If the cable is kinked or chafed, have it replaced.
4. Lubricate the cable with a commercially-available cable lubricant to prevent premature rust and corrosion.

Clutch System

Refer to *Safety Precautions* on page 43.

Clutch Freeplay



(1) clutch lever

Inspection

Check freeplay.

Freeplay: 10–20 mm (3/8 - 3/4 in)

If necessary, adjust to the specified range.

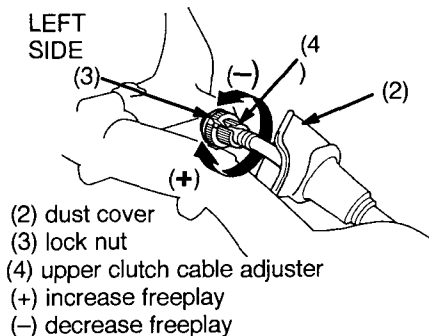
Adjustment

Adjust freeplay in the following order until the standard range is obtained:

- upper clutch assembly adjuster
- lower clutch cable adjuster
- clutch adjuster (on clutch housing)

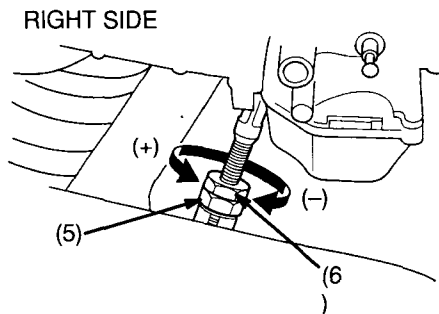
Clutch System

Upper clutch assembly adjuster:



1. Pull the rubber dust cover (2) back.
2. Loosen the lock nut (3).
3. Turn the upper clutch cable adjuster (4) to obtain the specified freeplay.
4. Tighten the lock nut and check the freeplay again.

Lower clutch cable adjuster:



If the upper clutch cable adjuster is threaded out near its limit — or the correct freeplay cannot be obtained:

1. Loosen the lock nut (3) and turn the

Clutch System

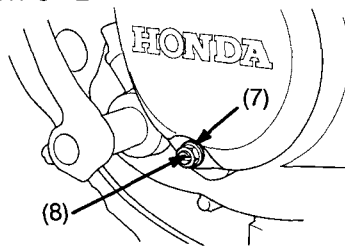
upper clutch cable adjuster (4) all the way in (to provide maximum freeplay).

2. Tighten the lock nut and pull the dust cover (2) back into its normal position.
3. Hold the adjusting nut (5) and loosen the lower lock nut (6) at the lower end of the cable.
4. Turn the lower adjusting nut to obtain the specified freeplay.
5. Hold the adjusting nut and tighten the lower lock nut. Check the adjustment.

Clutch adjuster (on clutch housing):

Major adjustments can be made with the clutch adjuster on the clutch housing.

RIGHT SIDE



- (7) lock nut
(8) clutch adjuster

1. Loosen the lock nut (3) and turn the upper clutch cable adjuster (4) all the way in (to provide maximum freeplay).

Clutch System

2. Loosen the clutch lock nut (7) and turn the clutch adjuster (8) counterclockwise until a slight resistance is felt.
3. Turn the clutch adjuster back in clockwise 1/8 to 1/4 turn and tighten the clutch lock nut.
4. Readjust the lower cable adjuster for proper freeplay, using the lower lock nut (5) and lower adjusting nut (6).
5. Start the engine, pull the clutch lever in, and shift into gear. Make sure the engine does not stall and the motorcycle does not creep. Gradually release the clutch lever and open the throttle. Your motorcycle should move smoothly and accelerate gradually.

If you can't get proper adjustment, or the clutch does not work properly, see your Honda dealer.

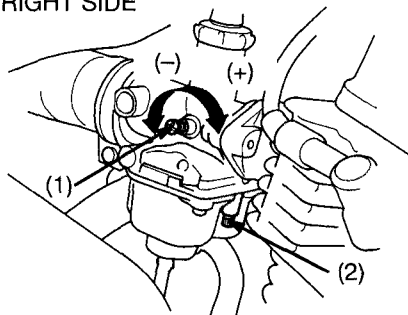
Other Inspection & Lubrication

- 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.

Refer to *Safety Precautions* on page 43.

Engine Idle Speed

RIGHT SIDE



- (1) throttle stop screw (+) increase rpm
(2) air screw (-) decrease rpm

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

upright on firm, level ground after warm-up.

The best way to set the idle speed is with a tachometer. The instructions follow. However, you can approximate the correct idle speed by adjusting the screw in or out until the engine idles smoothly, without stalling.

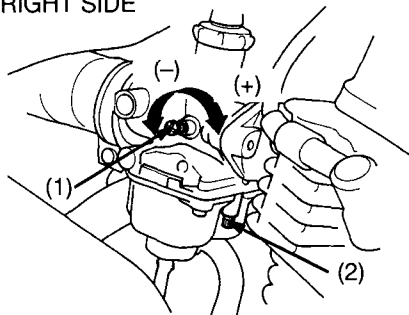
1. Shift to neutral after warming up the engine.
2. Connect a tachometer, following the tachometer manufacturer's instructions.
3. Adjust idle speed with the throttle stop screw (1).

Idle Speed: $1,400 \pm 100$ rpm

Carburetor

Idle Mixture

RIGHT SIDE



- (1) throttle stop screw (+) increase rpm
(2) air screw (-) decrease rpm

1. Turn the air screw (2) in (clockwise) until you hear the engine miss or decrease in speed.

2. Then count the turns as you turn the air screw out (counterclockwise) until the engine again misses or decreases in speed.

3. Set the air screw exactly between these two extreme positions.

Generally, from a fully closed position, the correct setting (between extremes of rich and lean) will be approximately:

1 3/4 turns.

4. If idle speed changes after adjusting the fuel mixture, readjust the idle speed by turning the throttle stop screw (1).

More About: Carburetor Adjustment

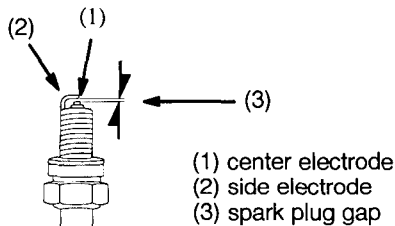
- Remember, idle speed adjustment is not a “cure-all” for other problems in your engine’s fuel-delivery system. Adjusting the idle will not compensate for a fault elsewhere.
- The best way to assure proper carburetion is to see your Honda dealer for regularly scheduled servicing.

Spark Plug

Refer to *Safety Precautions* on page 43.

Recommended plugs:

Standard	CR7HSA (NGK) or U22FSR-U (NIPPONDENSO)
For cold climate (below 5° C, 41° F)	CR6HSA (NGK) or U20FSR-U (NIPPONDENSO)
For extended high speed riding	CR8HSA (NGK) or U24FSR-U (NIPPONDENSO)



1. Clean any dirt from around the spark plug base.
2. Disconnect the spark plug cap.
3. Remove the spark plug with a plug wrench.
4. Inspect the spark plug electrodes for wear. The center electrode (1) should have square edges. The side electrode (2) should not be eroded. The insulator should not be cracked or chipped.

Spark Plug

5. Check the spark plug gap (3), using a wire-type feeler gauge. If adjustment is necessary, bend the side electrode carefully. The gap should be:

0.6-0.7 mm (0.02 - 0.03 in)

Make sure the plug washer is in good condition.

If you have to install a new plug, first check the gap.

6. With the plug washer attached, thread the spark plug in by hand (to prevent cross-threading).
7. Tighten the spark plug:
 - about 1/8 – 1/4 turn after seats (if the old plug is good).
 - about 1/2 turn after it seats (if installing a new plug).

More About: Spark Plug

- Always use a recommended spark plug. Using the wrong spark plug could cause severe engine damage.
- The recommended standard spark plug is satisfactory for most riding conditions. However, if you plan to ride for extended periods at high speeds or near maximum power (high engine rpm) in hot climates, or plan extended riding in cold climate, a different plug may be recommended (page 74).

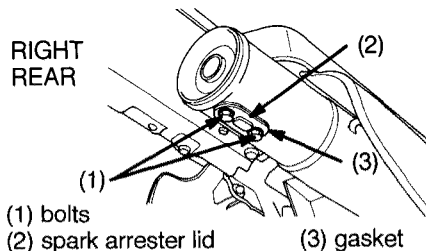
Spark Arrester

Refer to *Safety Precautions* on page 43.

Regular servicing prevents carbon buildup (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.



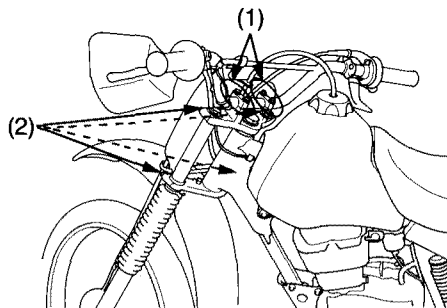
1. Remove the bolts (1), the spark arrester lid (2), and gasket (3).
2. Start the engine.
3. Momentarily block and uncover the end of the muffler with a shop towel to create exhaust system back pressure while revving up the engine about 20 times.
4. After cleaning the spark arrester of carbon, install the gasket, spark arrester lid, and bolts.

Suspension

Refer to *Safety Precautions* on page 43.

Loose, worn, or damaged suspension components may adversely affect the handling and stability of your motorcycle. If any suspension components appear worn or damaged, see your Honda dealer for further inspection. Your dealer is qualified to determine whether or not replacement parts or repairs are needed.

Front Suspension Inspection



- (1) upper mounting bolts
- (2) lower mounting bolts

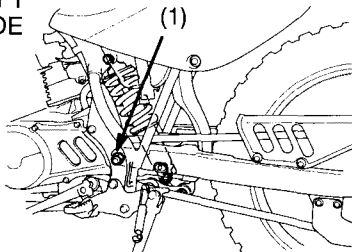
1. Check fork operation. Pull the front brake lever in, to lock the brake. Then pump up and down on the fork legs several times. The suspension should function smoothly. There should be no oil leakage.

Suspension

2. Check the security of all handlebar and fork mounting bolts (1) (2). If any front suspension components appear worn or damaged, see your authorized Honda dealer for further inspection.

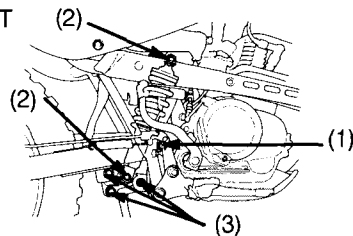
Rear Suspension Inspection

LEFT
SIDE



(1) swingarm bushing

RIGHT
SIDE



- (1) swingarm bushing
- (2) shock absorber attachment points
- (3) suspension linkage attachment points

1. Check the swingarm bushings (1). Place the motorcycle on a maintenance stand. Push hard against the side of the rear wheel and feel for any side-to-side looseness in the bushings.
2. Check that the fasteners for the shock absorber attachment points (2) and rear suspension linkage attachment points (3) are secure.

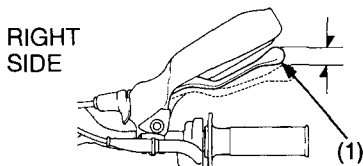
Suspension

3. Check for oil leaks in the shock absorber. If any rear suspension components appear worn or damaged, see your Honda dealer for further inspection.

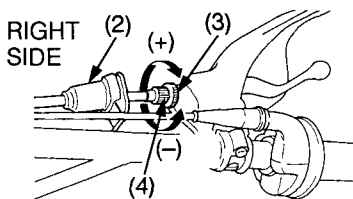
Brakes

Refer to *Safety Precautions* on page 43.

Front Brake Lever Freeplay



(1) front brake lever



(2) dust cover
(3) lock nut
(4) front brake
cable adjuster

(+) increase freeplay
(-) decrease freeplay

Inspection

Check freeplay (1) by pulling in slowly on the front brake lever until the brake starts to engage.

Freeplay: 20–30 mm (3/4 - 1 1/2 in)

If necessary, adjust to the specified range.

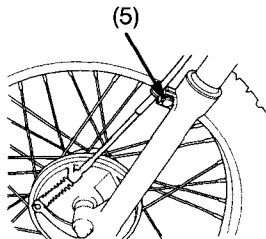
Adjustment

1. Pull the rubber dust cover (2) back.
2. Loosen the lock nut (3) and turn the front brake cable adjuster (4).
3. Tighten the lock nut. Return the dust cover to its normal position.
4. Adjust the brake, release it, then spin the wheel and check that it rotates freely. Repeat this procedure several times.

5. Check the freeplay.

If the cable adjuster is threaded out near its limit or if the correct freeplay cannot be obtained using the cable adjuster:

LEFT
FRONT



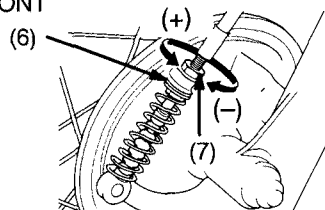
(5) cable guide bolt

1. Loosen the lock nut and turn the cable adjuster all the way in.
- 2 Tighten the lock nut and return the rubber dust cover to its normal position.

3. Loosen the front brake cable guide bolt (5).

4. At the lower end of the cable, loosen the lower lock nut (6). Turn the lower adjusting nut (7) to obtain the specified freeplay. Tighten the lower lock nut.

LEFT
FRONT



(6) lower lock nut

(7) lower adjusting nut

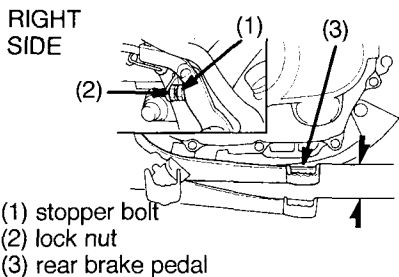
(+) increase freeplay

(-) decrease freeplay

Brakes

5. Tighten the front brake cable guide bolt.
6. Apply the brake, release it, then spin the wheel and check that it rotates freely. Repeat this procedure several times.
7. Check the freeplay. If you cannot adjust the freeplay properly, see your Honda dealer.

Rear Brake Pedal Freeplay



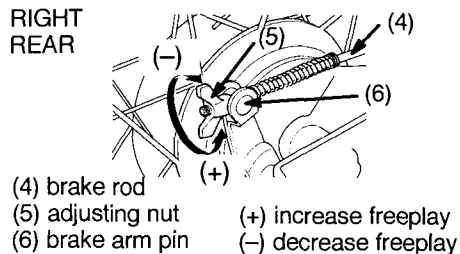
Inspection

1. Place your motorcycle on its side stand.
2. Check freeplay by slowly depressing the brake pedal (3) until the brake starts to engage.

Freeplay: 20-30 mm (3/4 - 1 1/4 in)

If necessary, adjust to the specified range.

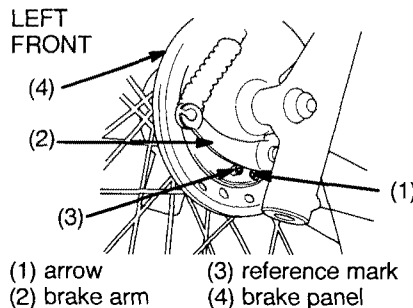
Adjustment



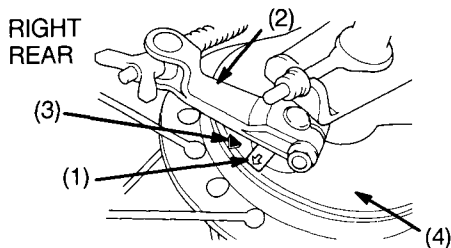
1. Turn the rear brake adjusting nut (5). Make sure the cut-out on the adjusting nut is seated on the brake arm pin (6).
2. Apply the brake, release it, and then spin the wheel and check that it rotates freely. Repeat this procedure several times.
3. Check the freeplay. If you can't adjust the freeplay properly, see your Honda dealer.

Brake Shoe Wear

The front and rear brakes are equipped with external brake wear indicators that let you check brake wear without disassembly. Application of the brake control (lever or pedal) causes the arrow on the brake arm to move toward a reference mark on the brake panel.



Brakes



- (1) arrow (3) reference mark
(2) brake arm (4) brake panel

1. Place your motorcycle on its side stand.
2. Apply the brake control (lever or pedal) and check the movement of the arrow (1) on the brake arm (2). Replace the brake shoes if the arrow aligns with the reference mark (3) on the brake panel (4) upon full application of the brake. If

replacement is necessary, see your Honda dealer.

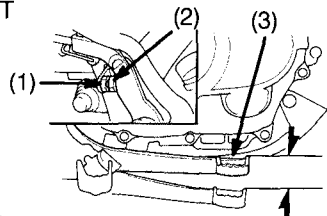
Additional Inspections & Lubrication

- Check that the front lever and rear pedal assemblies are positioned properly and the securing bolts are tight.
- Check the front brake cable for kinks or signs of wear that could cause sticking or failure.
- Lubricate the front brake cable with a commercially-available cable lubricant to prevent premature wear and corrosion.

- Front: Make sure the brake arm, spring, and fasteners are in good condition.
- Rear: Make sure the brake rod, brake arm, spring, and fasteners are in good condition.

Rear Brake Pedal Height Adjustment

RIGHT
SIDE



- (1) lock nut
(2) stopper bolt (3) rear brake pedal

1. Loosen the lock nut (1) and turn the stopper bolt (2).
2. Tighten the lock nut.
3. Check the freeplay (page 82).

Wheels

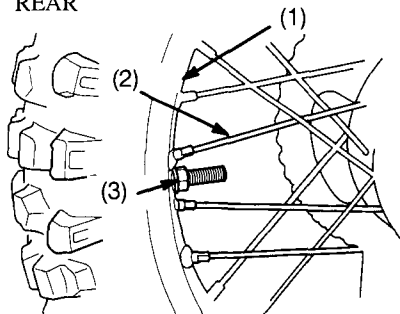
Refer to *Safety Precautions* on page 43.

Maintenance of spoke tension and wheel trueness (roundness) is critical to safe motorcycle operation. During the first 200 miles (350 km), spokes will loosen more rapidly due to the initial seating of the parts. Excessively loose spokes may result in instability at high speeds and the possible loss of control. It's also important that the rim locks are secure to prevent tire slippage.

It is not necessary to remove the wheels to perform the recommended service in the Maintenance Schedule. However, information for wheel removal is provided for emergency situations.

Wheel Rims & Spokes

REAR



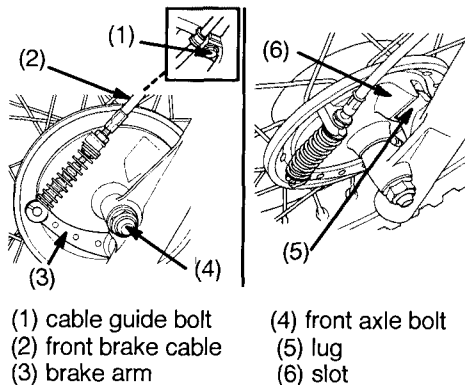
(1) wheel rim
(2) spoke

(3) rim lock

1. Inspect the wheel rims (1) and spokes (2) for damage.
2. Tighten any loose spokes or rim locks (3).

3. Rotate the wheel slowly to see if it appears to “wobble.” If it does, the rim is out of round or not “true.” If the wobble is noticeable, see your Honda dealer for inspection.

Front Wheel Removal



Removal

1. Raise the front wheel off the ground by placing a maintenance stand or support block under the engine. Secure the rear of the motorcycle with tie down straps.
2. Loosen the cable guide bolt (1) on the fork leg.
3. Disconnect the front brake cable (2) from the brake arm (3).
4. Remove the front axle nut (4) and front axle.
5. Remove the wheel.
6. Pull the brake assembly out carefully.

Wheels

Take care to prevent getting grease, oil, or dirt on the brake shoe surfaces. This can cause poor brake performance or rapid brake shoe wear after reassembly.

Installation

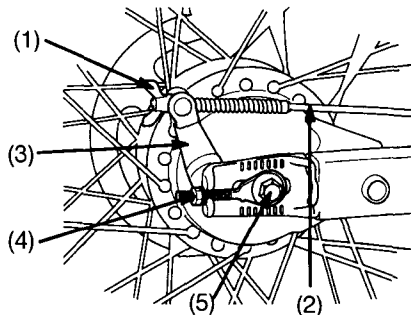
1. Reverse the removal procedure.
Make sure the lug (5) on the fork leg is located in the slot (6) in the brake panel.
2. Torque the axle nut to:
63 N·m (6.3 kg-m, 46 ft-lbs)
3. Check front brake adjustment (page 80).

If a torque wrench was not used to install the wheel, see your Honda dealer as soon as possible to verify

proper assembly. Improper assembly may lead to loss of braking capacity.

Rear Wheel Removal

RIGHT REAR

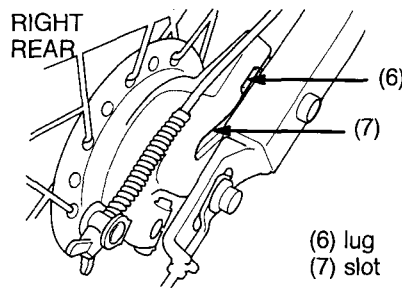


- | | |
|---------------|-------------------|
| (1) adjuster | (4) adjusting nut |
| (2) brake rod | (5) axle nut |
| (3) brake arm | |

Removal

1. Raise the rear wheel off the ground by placing a maintenance stand or support block under the engine. Secure the front of the motorcycle with tie down straps.
2. Unscrew the rear brake adjuster (1). Press the rear brake pedal and disconnect the brake rod (2) from the brake arm (3).
3. Loosen the adjusting nut (4) on the chain adjuster on both sides.
4. Unscrew the axle nut (5). Pull the axle out. Push the wheel forward and derail the drive chain from the rear sprocket. Remove the wheel.
Take care to prevent getting grease, oil, or dirt on the brake shoe

surfaces. This can cause poor brake performance or rapid brake shoe wear after reassembly.



Installation

1. Reverse the removal procedure. Make sure the lug (6) on the swingarm is located in the slot (7) in

Wheels

the brake panel. Check that the chain adjusters are installed properly.

2. Adjust the drive chain (page 104).
3. Torque the axle nut to:
63 N·m (6.3 kg-m, 46 ft-lbs)
4. Adjust the rear brake (page 85).
5. Apply the brake, release it, then spin the wheel and check that it rotates freely. Repeat this procedure several times.

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

Tires & Tubes

Refer to *Safety Precautions* on page 43.

To safely operate your motorcycle, the tires must be the proper type (off-road) 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.

Air Pressure

Front	100 kPa (1.0 kg/cm ² , 15 psi)
Rear	125 kPa (1.25kg/cm ² , 18 psi)

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. Underinflated tires can also cause wheel damage in rocky terrain. Overinflated tires make your motorcycle 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.

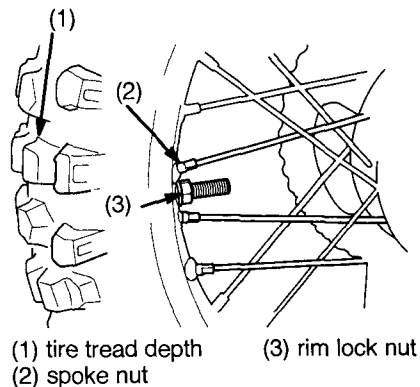
Tires & Tubes

Always check air pressure when your tires are “cold.” If you check air pressure when your tires are “warm” — even if your motorcycle 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 pressures, the tires will be underinflated.

If you decide to adjust tire pressures for a particular riding condition, make changes a little at a time.

Inspection

A flat tire or blowout is inconvenient and may even cause an accident. Take time to inspect your tires and wheels before you ride. For more information about handling flat tires, see page 120.



Tires & Tubes

1. Inspect carefully for bumps or bulges in the side of the tire or the tread. Replace any tire that has a bump or bulge.
2. Look closely for cuts, slits, or cracks in the tires. Replace a tire if you can see fabric or cord.
3. Check for rocks or other objects embedded in the tire or tread. Remove any objects.
4. Measure tread depth (1). Replace the tire before depth at the center reaches 3 mm (1/8 in.), or any time you notice a reduction in traction.
5. Check the position of both valve stems. A tilted valve stem indicates the tube is slipping inside the tire or the tire is slipping on the rim. See your Honda dealer.

Tube Replacement

If a tube is punctured or damaged, you should replace it as soon as possible. A repaired tube may not have the same reliability as a new one, and it may fail while you are riding. For information on making a temporary repair, see page 120.

Use a replacement tube equivalent to the original.

We recommend that tubes be replaced by your Honda dealer. Replacing a tube requires removing and reinstalling the wheel. Any time a tube is replaced, carefully inspect the tire as described on page 92.

Tires & Tubes

Tire Replacement

The tires that came on your motorcycle were designed to provide a good combination of handling, braking, durability, and comfort across a broad range of riding conditions.

WARNING

Installing improper tires on your motorcycle 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 tire recommended in this owner's manual.

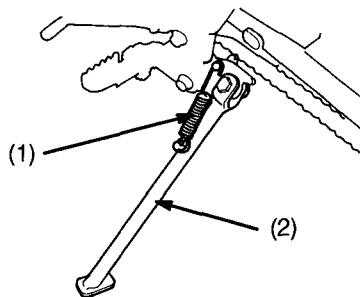
Front	2.50-19-4 PR
Rear	3.00-16-4 PR

- Use a replacement tire equivalent to the original.
- Replace the tube any time you replace a tire. The old tube will probably be stretched and, if installed in a new tire, could fail.
- Have the wheel balanced after a new tire is installed.
- We recommend that tires be replaced by your Honda dealer.

Side Stand

Refer to *Safety Precautions* on page 43.

LEFT SIDE



(1) side stand spring

(2) side stand

1. Check the side stand spring (1) for damage and loss of tension.
2. Check the side stand assembly (2) for freedom of movement.

If the side stand is stiff or squeaky, clean the pivot area and lubricate the pivot bolt with clean engine oil.

Drive Chain

Refer to *Safety Precautions* on page 43.

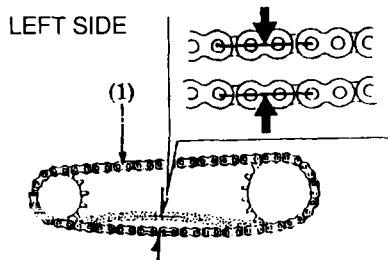
The service life of the chain depends on proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain or sprockets.

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

Before servicing your drive chain, turn the engine OFF, lower the side stand, 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



(1) drive chain

1. Check slack in the lower drive chain
(1) run midway between the sprockets. Drive chain slack should allow the following vertical movement by hand:
25-35 mm (1 - 1 3/8 in)

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.

3. Inspect the drive chain for:

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

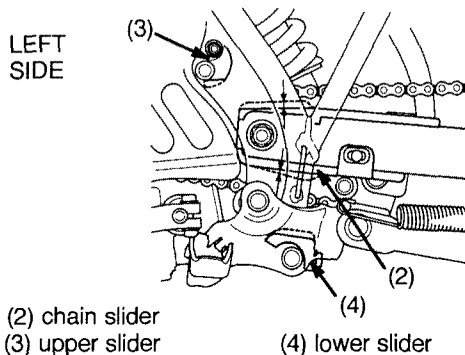
Replace the drive chain (page 101) if it has damaged rollers, loose pins, or kinks that cannot be freed. Lubricate the drive chain (page 100) if it appears dry or shows sign of rust.

Lubricate any kinked or binding links

and work them free. Adjust chain slack if needed.

4. Check the chain slider (2) for wear. If the depth of the groove in the slider exceeds the depth limit, have your Honda dealer replace the chain slider. Chain slider depth limit:

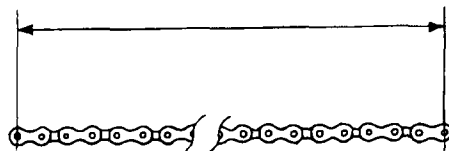
6 mm (1/4 in)



Drive Chain

5. Replace the drive chain if chain slack is excessive when the rear axle is moved to the farthest limit of adjustment. Excessive slack indicates the chain is worn beyond its service limit.

To check the chain's service limit, remove the drive chain (page 101). Then measure the distance between a span of 117 pins, from pin center to pin center. If the distance exceeds the service limit, the drive chain is worn out and should be replaced.

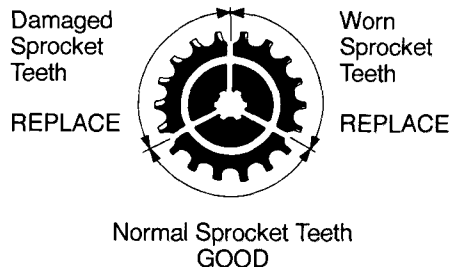


Measure a span of 117 pins

New Chain: 1,486 mm (58.5 in)
Service Limit: 1,516 mm (59.7 in)

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.

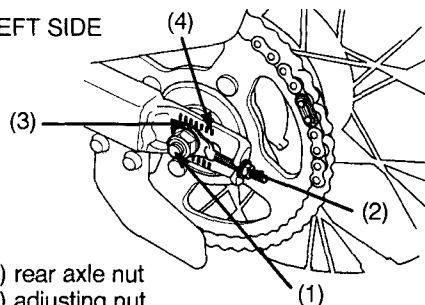


NOTICE

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

Adjustment

LEFT SIDE



- (1) rear axle nut
- (2) adjusting nut
- (3) adjuster index mark
- (4) graduated scale

1. Loosen the rear axle nut (1).
2. Turn the adjusting nuts (2) on the right and left chain adjusters an equal number of turns to increase or decrease chain slack.

Drive Chain

3. Align the chain adjuster index marks (3) with the graduated scales (4) on both sides of the swing arm.

4. Torque the rear axle nut to:

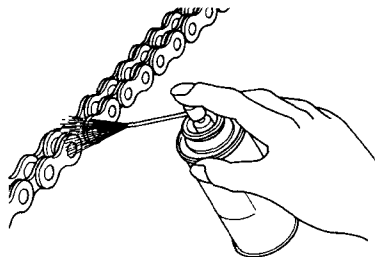
63 N·m (6.3 kg-m, 46 ft-lbs)

If a torque wrench was not used to install the wheel, see your Honda dealer as soon as possible to verify proper assembly. Improper assembly may lead to loss of braking capacity.

5. Recheck drive chain slack.

6. Check rear brake pedal freeplay and adjust as necessary (page 82). Freeplay is affected when repositioning the rear wheel to adjust drive chain slack.

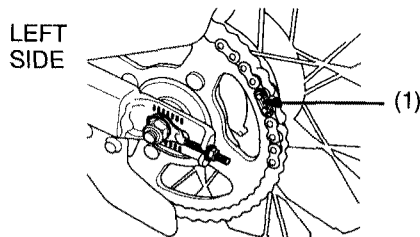
Lubrication



1. Turn the rear wheel by hand. Saturate each chain link joint so that the lubricant penetrates between the link plates, pins, bushings, and rollers.

Drive Chain

Removal, Cleaning & Replacement



(1) master link retaining clip

1. Remove the master link retaining clip (1) with pliers. Do not bend or twist the clip. Remove the master link. Remove the drive chain.
2. Clean the drive chain with a non-flammable (high flash point)

solvent such as kerosene — not gasoline — and allow it to dry.

3. Inspect the drive chain for possible wear or damage. Replace the drive chain if it has damaged rollers, loose fitting links, or otherwise appears unserviceable.
4. Inspect the sprocket teeth for wear or damage. We recommend replacing the sprocket whenever a new chain is installed.
5. Lubricate the drive chain.

Drive Chain

6. Pass the chain over the sprockets and join the ends of the chain with the master link. For ease of assembly, hold the chain ends against adjacent rear sprocket teeth while inserting the master link. Install the master link retaining clip so that the closed end of the retaining clip will face the direction of forward wheel rotation.

More About: Drive Chain

- The master link is the most critical element of drive chain security. Master links are reusable, as long as they remain in excellent condition. We recommend installing a new master link retaining clip when the drive chain is reassembled.
- You may find it easier to install a new chain by connecting it to the old chain with a master link and pulling the old chain to position the new chain on the sprockets.

Appearance Care

Refer to *Safety Precautions* on page 43.

Frequent cleaning and polishing will keep your Honda looking newer longer. Frequent cleaning also identifies you as an owner who values his motorcycle. A clean motorcycle is also easier to inspect and service. While you're cleaning, be sure to look for damage, wear, and gasoline or oil leaks.

General Recommendations

- To clean your motorcycle, you may use:
 - water
 - a mild detergent and water
 - a spray and wipe cleaner/polisher
 - a 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 motorcycle.
- If your motorcycle is still warm from recent operation, give the engine and exhaust system time to cool off.

Appearance Care

- We recommend the use of a garden hose to wash your motorcycle. High pressure washers (like those at coin-operated car washes) can damage certain parts of your motorcycle. If you use a high pressure washer, avoid spraying the following areas:

wheel hubs	under fuel tank
muffler outlet	drive chain
area under seat	carburetor
engine stop button	

Washing Your Motorcycle With A Mild Detergent

1. Rinse your motorcycle thoroughly with cool water to remove loose dirt.
2. Fill a bucket with cool water. Mix in a mild detergent, such as dish washing liquid or a product made especially for washing motorcycles or automobiles.
3. Wash your motorcycle with a sponge or a soft towel. As you wash, check for heavy grime. If necessary, use a cleaner/degreaser to remove the grime.
4. After washing, rinse your motorcycle thoroughly with plenty of clean water to remove any residue.

Appearance Care

5. Dry your motorcycle with a chamois or a soft towel.
6. Lubricate the drive chain to prevent rusting.
7. Start the engine and let it idle for several minutes. The engine heat will help dry moist areas.
8. As a precaution, ride at a slow speed and apply the brakes several times. This will help dry the brakes and restore normal braking performance.

Helpful Tips & Suggestions

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 motorcycle owner.

Preparing for a Ride	108
Transporting Your Honda	110
Storing Your Honda	112
You & the Environment	114

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, the Bureau of Land Management, riding clubs, and off-road magazines are good sources of information.

What to Take to the Riding Area

Along with your motorcycle 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 Unexpected Problems*, which begins on page 117.

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, tubes, and tires

Preparing for a Ride

- extra parts, such as a drive chain and master links, 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.

What to Take on the Trail

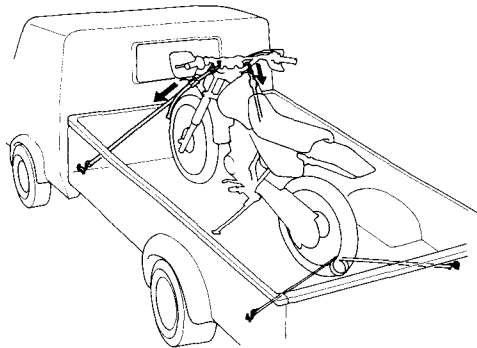
What you take with you during a ride depends on the kind of terrain, how long you expect to ride, how far you might go from your base camp or help, and how experienced you or your companions are in making repairs.

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 9).

Transporting Your Honda

If you use a truck or motorcycle trailer to transport your Honda, we recommend that you follow these guidelines:

- Use a loading ramp.
- Make sure the fuel valve is off.
- Secure the motorcycle in an upright position, using motorcycle tie-down straps. Avoid using rope, which can loosen and allow the motorcycle to fall over.



To secure your motorcycle, brace the front wheel against the front of the truck bed or trailer rail. Attach the lower ends of two straps to the tie-down hooks on your vehicle. Attach the upper ends of the straps to the handlebar (one on the right side, the

Transporting Your Honda

other on the left), close to the front fork. Check that the tie-down straps do not contact any control cables or electrical wiring.

Tighten both straps until the front suspension is compressed about half-way. Too much pressure is unnecessary and could damage the fork seals.

Use another tie-down strap to keep the rear of the motorcycle from moving.

We recommend that you do not transport your motorcycle on its side. This can damage the motorcycle, and leaking gasoline could be a hazard.

Storing Your Honda

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

To reduce or prevent deterioration that can occur during storage, also follow the following procedures.

Preparation for Storage

1. Change the engine oil (page 59).
2. Fill the fuel tank and make sure the fuel cap is properly installed. (If the motorcycle will be stored for more than two months, you may want to add Pro Honda Fuel Stabilizer or an equivalent.)
3. Drain the carburetor into an approved gasoline container.
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 and you can be burned or seriously injured when handling fuel.

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

Storing Your Honda

4. Wash and dry your motorcycle.
5. Lubricate the drive chain.
6. Inflate the tires to their recommended pressures.
7. Place your motorcycle in an unheated area, free of dampness, with a minimum of daily temperature variation.
8. If you cover your motorcycle, use 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

1. If your motorcycle has been stored for more than four months — change the engine oil.
2. If your motorcycle has been stored for more than two months *without* a fuel stabilizer — drain and replace the fuel.

If your motorcycle has been stored for more than 12 months *with* a fuel stabilizer — drain and replace the fuel.
- 3 Lubricate the drive chain.
4. Perform a pre-ride inspection (page 25), then test-ride the motorcycle at low speeds.

You & the Environment

Owning and riding an off-road motorcycle 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.

- **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 motorcycles 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 motorcycle. 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.

You & the Environment

- **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. Put all 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.

Protecting nature is your responsibility. When you show respect for the land, wildlife, and other people, you also

help preserve the sport of off-road riding.

Taking Care of Unexpected Problems

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 108).

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Taking Care of Unexpected Problems

General Guidelines

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 motorcycle 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 motorcycle 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 motorcycle back to base. For example, if you are close enough, you (or you and another person) might be able to push it back.

Whatever the problem, the most important rules are:

- Always put personal safety first.

Taking Care of Unexpected Problems

- If you make temporary repairs, be sure to make permanent repairs as soon as you can.
- Do not continue riding if you are hurt or your motorcycle is not in safe riding condition.

Additional recommendations for specific problems follow.

If Your Engine Quits or Won't Start

Following are some troubleshooting tips to help you identify the source of the problem if your engine dies or won't restart

If the engine wasn't making any unusual noises before it quit running, and it feels normal when you operate

the kickstarter, you can probably rule out a major mechanical problem.

The next area to check is the fuel system:

- Make sure there is enough gas in the tank and the fuel valve is at the ON or RESERVE position.
- Check the fuel cap vent tube to see if it is pinched or obstructed.
- Turn the fuel valve OFF, disconnect the fuel line that goes from the fuel valve to the carburetor, then momentarily turn the fuel valve ON. If fuel does not flow out, there is an obstruction in the fuel tank or the fuel valve.

Taking Care of Unexpected Problems

If the fuel system appears to be okay, check the ignition system (this requires a spark plug wrench):

- Check that the spark plug cap isn't loose or disconnected.
- Disconnect the spark plug cap and remove the spark plug. Connect the spark plug cap to the spark plug and ground the threaded portion of the spark plug on the cylinder head.
- Operate the kickstarter while you watch the spark plug. If it sparks, the ignition system is probably working. If there is no spark, install a new spark plug, if you have one with you. If there is still no spark, there is a problem in the ignition system.

If you cannot identify or correct the problem, you will have to push your

motorcycle back to your base or get some help.

If You Have a Flat Tire

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

If you have a slow leak or a minor puncture, there are two ways to try making a temporary repair:

- Use an aerosol tire sealer to seal the puncture and inflate the tube. (This can be done without removing the tire or wheel.)
- Use a tube patch kit to repair the puncture. (This requires removing the tire.)

Taking Care of Unexpected Problems

If the leak is more serious, or a temporary repair doesn't hold, the tube must be replaced. The tire will also need to be replaced if it is damaged (page 94). Replacing a tube or tire involves removing and re-installing the wheel (pages 87,88).

If you are unable to repair a flat tire on the trail, you will need to push the motorcycle back to your base or send for help. We strongly recommend that you do not try to ride with a flat tire. The motorcycle 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 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 a buddy for help. Do not ride if you will risk further injury.

If you decide you are capable of riding safely, carefully inspect your motorcycle for damage and determine if it is safe to ride. Use any tools you have to check the tightness of critical nuts and bolts securing such parts as the handlebar, control levers, brakes, and wheels. If there is minor damage,

Taking Care of Unexpected Problems

or you are unsure about possible damage but decide to try riding the motorcycle back to your base, ride slowly and cautiously.

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

If a Component Fails

The drive chain, master link, brake lever 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 the drive chain comes off because the master link clip gets knocked off, you may be able to put the chain back on with a new master link. However, if the chain breaks or does other damage when it comes off, you may not be able to make a trailside repair.

Taking Care of Unexpected Problems

- If a front brake cable or lever is damaged, you may be able to ride carefully back to your base using the rear brake for slowing or stopping.
- If the clutch lever breaks, you may be able to temporarily switch the front brake lever to the clutch side, then ride carefully back to base using the rear brake for slowing or stopping.
- If you damage a throttle cable or other critical component, your motorcycle 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 & Consumer Information

This section contains dimensions, capacities, and other technical data, plus information on government requirements, your warranty, and how to get an official Honda service manual.

Technical Information

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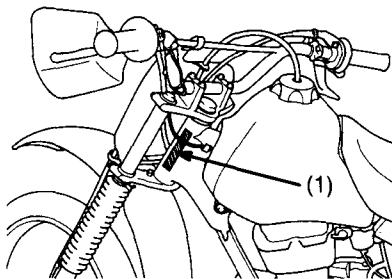
Vehicle Identification

Serial Numbers

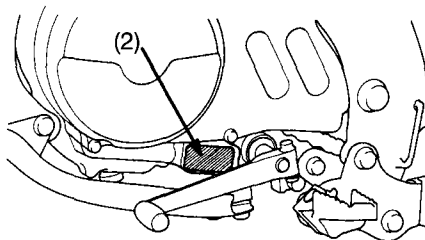
The frame and engine serial numbers are required when you register your motorcycle. They may also be required when ordering replacement parts. You may record these numbers in the Quick Reference section at the rear of the manual.

The frame number (1) is stamped on the left side of the steering head.

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



(1) frame number



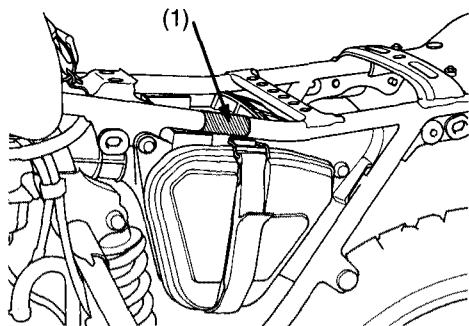
(2) engine number

Vehicle Identification

Color Label & Code

The color label (1) is attached to the left side of the frame tube.

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 the manual.



(1) color label

Specifications

Dimensions	
Overall length	1,855 mm (73.0 in)
Overall width	800 mm (31.5 in)
Overall height	1,030 mm (40.5 in)
Wheelbase	1,255 mm (49.4 in)

Weight	
Dry weight	68 kg (150 lbs)

Fuel & Lubricants	
Fuel tank capacity	6.5 ℓ (1.72 US gal, 1.43 Imp gal) including reserve
Fuel tank reserve	0.9 ℓ (0.24 US gal, 0.20 Imp gal)
Fuel recommendation	unleaded gasoline, pump octane number of 86 or higher
Engine oil capacity	0.9 ℓ (1.0 US qt, 0.8 Imp qt) after draining 1.0 ℓ, (1.1 US qt, 0.9 Imp qt) after disassembly

Specifications

Fuel & Lubricants	
Engine oil recommendation	API Service Classification SF or SG, SAE 10W-40, Pro Honda GN4 or HP4 4-stroke oil or an equivalent motorcycle oil
Drive chain lubricant	Pro Honda Chain Lube or an equivalent, or SAE 80 or 90 gear oil
Air cleaner oil	Pro Honda Foam Filter Oil or equivalent

Capacities	
Passenger capacity	operator only; no passenger
Maximum weight capacity	100 kg (220 lbs)
Cargo capacity	none

Engine Specifications	
Displacement	99.2 cm ³ (6.05 cu. in)
Bore & stroke	53 x 45 mm (2.09 x 1.77 in)
Compression ratio	9.4:1

Specifications

Engine Specifications	
Valve clearance (cold)	Intake: 0.05 mm (0.002 in) Exhaust: 0.05 mm (0.002 in)
Spark plug (standard)	CR7HSA (NGK) or U22FSR-U (NIPPONDENSO)
Spark plug (cold climate: below 41° F, 5° C)	CR6HSA (NGK) or U20FSR-U (NIPPONDENSO)
Spark plug (extended high speed riding)	CR8HSA (NGK) or U24FSR-U (NIPPONDENSO)

Spark plug gap	0.6–0.7 mm (0.02–0.03 in)
Idle speed	1,400 ± 100 rpm

Power Transmission	
Primary reduction	4.438
Gear ratio, 1st	3.083
2nd	1.882
3rd	1.400
4th	1.130
5th	0.923

Specifications

Power Transmission	
Final reduction	3.571
Final drive	chain
Drive chain freeplay	25 - 35 mm (1 - 1 3/8 in)
New chain length	1,486 mm (58.5 in), distance between a span of 117 pins
Used chain service limit length	1,516 mm (59.7 in), distance between a span of 117 pins

Chassis & Suspension	
Caster	28° 30'
Trail	110 mm (4.3 in)
Tire size, front	2.50-19-4PR
Tire size, rear	3.00-16-4PR
Tire pressure, front (cold)	100 kPa (1.0 kg/cm ² , 15 psi)
Tire pressure, rear (cold)	125 kPa (1.25 kg/cm ² , 18 psi)
Suspension, front	140 mm (5.5 in) axle travel
Suspension, rear	120 mm (4.7 in) axle travel

Specifications

Torque Specifications	
Oil drain plug	25 N·m (2.5 kg-m, 18 ft-lbs)
Wheel axles	63 N·m (6.3 kg-m, 46 ft-lbs)

Noise Emission Control System

TAMPERING WITH THE NOISE CONTROL SYSTEM IS

PROHIBITED: Federal law prohibits 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. (USA only)

AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW:

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 contains cosolvents and corrosion inhibitors to protect the fuel system. Gasoline containing more than 5%

Oxygenated Fuels

methanol by volume may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of your fuel system.

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. Damage caused by spilled fuel is not covered under warranty.

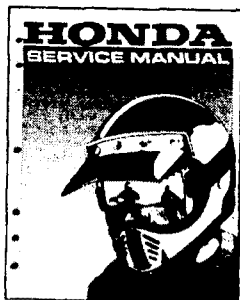
High Altitude Carburetor Adjustment

Your engine's air-fuel mixture becomes overly rich when operated at high altitudes. 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.

The carburetor must be returned to standard factory specifications before riding again at lower altitudes (below 4,000 feet, 1,200 m).

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

Service Manuals



The Service Manual (Part No. 61GN110) used by your Honda dealer is available from your dealer's parts department.

Also available, but not necessary to service your model:

- The Honda Common Service Manual (Part Number: 61CM000) explains the theory of operation and provides basic service information for various systems common to all Honda motorcycles, motor scooters, and ATVs.

These Honda manuals are written for the professional technician, but most mechanically-capable owners should find them easy to use if they have the proper tools and observe proper safety standards. Special Honda tools are necessary for some procedures.

Warranty Coverage

Your new Honda is covered by these warranties:

- Motorcycle Limited Warranty
- Noise Control Warranty

There are responsibilities, restrictions, and exclusions which apply to these warranties. Please read the Honda Motorcycle Warranty Booklet (USA only) given to you by your Honda dealer at the time of purchase. Be sure to keep your Honda owner's card with your Warranty Booklet.

It is important to realize that your warranty coverage applies to defects in the manufacture of your Honda. Your warranty coverage does not apply to wear and tear associated with using the motorcycle.

Your warranty coverage will not be voided if you choose to perform your own maintenance. However, you should have the proper tools and service information and be mechanically qualified. Failures that occur due directly to improper maintenance are not covered.

Extended coverage is available for purchase. Ask your Honda dealer about the HondaCare Protection Plan (USA only).

Warranty Service

Please remember that recommended maintenance interval servicing is not included in your warranty coverage. Additionally, your warranty does not apply to the normal wear of items (such as brakes, tires, etc.).

If you believe you have a problem with your Honda, call the service department of your Honda dealer. Make an appointment for an inspection and diagnosis. Remember, as the owner of the motorcycle, you will be asked to authorize that inspection. Your dealer will give you the results of the inspection. If the problem is covered under warranty, your dealer will perform the warranty repairs for you.

If you have questions about warranty coverage or the nature of the repair, it

is best to talk to the service manager of your Honda dealer.

Sometimes, in spite of the best intentions of all concerned, a misunderstanding may occur. If you aren't satisfied with your dealer's handling of the situation, we suggest you discuss your problem with the appropriate member of the dealership's management team. If the problem has already been reviewed with the Service Manager, Parts Manager, Sales Manager, etc., contact the Owner of the dealership or his designated representative.

Contacting American Honda

Your owner's manual was written to cover most of the questions you might ask about your Honda. Any questions not answered in the owner's manual can be answered by your Honda dealer. If he doesn't have the answer right away, he will get it for you.

If you have a difference of opinion with your dealer, please remember that each dealership is independently owned and operated. That's why it's important to work to resolve any differences at the dealership level.

If you wish to comment on your experiences with your Honda or with your dealer, please send your comments to the following address:

Motorcycle Division, American Honda Motor Co., Inc., P.O. Box 2220, Torrance, CA 90509-2220, mailstop: 100-4W-5B, telephone: (310) 532-9811.

Please include the following information in your letter:

- name, address, and telephone number
- product model and serial number
- date of purchase
- dealer name and address

We will likely ask your Honda dealer to respond, or possibly acknowledge your comments directly.

Your Honda Dealer

Once you purchase your new Honda, get familiar with the organization of your Honda dealer so you can utilize the full range of services available.

The service department is there to perform regular maintenance and unexpected repairs. It has the latest available service information from American Honda. The service department will also handle warranty inspections and repairs.

The parts department offers Genuine Honda parts, Hondaline accessories, and Pro Honda products.

The same quality that went into your Honda can be found in Genuine Honda replacement parts. You'll also find comparable quality in the Hondaline

accessories and Pro Honda oil and chemical products distributed by American Honda.

The sales department offers HondaCare Protection Plan extended warranty. Ask your salesperson for the details.

You'll also find that your dealer is a source of information about American Honda's Rider Education Centers and the Honda Rider's Club of America. Your dealer can also fill you in on competition events in your area.

We're sure you'll be as pleased with the service your Honda dealer continues to provide after the sale as you are with the quality and dependability of your Honda.

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Memo

Memo

Quick Reference

The following is a brief, but important collection of information you need to know about your Honda. Even if you don't like to read owner's manuals, please be aware of the following information. 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 engine repairs are:

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

Quick Reference

Record important information here:

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

Quick Reference

Break-in Maintenance	first week of operation, about 200 miles (350 km)
Regular Maintenance	every 30 riding days, about 1,000 miles (1,600 km)
Pre-ride Inspection	Check the following items each time before you ride (page 25): tires, spokes & rims, leaks, engine oil, fuel, drive chain, cables, nuts & bolts, throttle, brakes, and clutch lever
Fuel/Capacity	unleaded gasoline, pump octane number of 86 or higher 6.5 ℓ (1.7 US gal, 1.43 Imp gal; reserve: 0.9 ℓ (0.24 US gal, 0.20 Imp gal)
Engine Oil	API Service Classification SF or SG; SAE 10W-40
Maximum Weight Capacity	100 kg (220 lbs) rider only (no passenger or cargo) and any accessories
Tire Pressure	Front: 100 kPa (1.0 kg/cm ² , 15 psi), check while tires cold Rear: 125 kPa (1.25 kg/cm ² , 18 psi)
Tire Size	Front: 2.50-19-4PR, Rear: 3.00-16-4PR
Spark Plug	CR7HSA (NGK) or U22FSR-U (NIPPONDENSO)



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