



09/08/05 17:20:31 32KTGC00_001



Honda SH125/150CRF



OWNER'S MANUAL



© Honda Motor Co., Ltd. 2009





09/08/05 17:20:36 32KTGC00_002



IMPORTANT INFORMATION

- **OPERATOR AND PASSENGER**

This scooter is designed to carry the operator and one passenger.

- **ON-ROAD USE**

This scooter is designed to be used only on the road.

- **READ THIS OWNER'S MANUAL CAREFULLY**

Pay special attention to the safety messages that appear throughout the manual. These messages are fully explained in the "A Few Words About Safety" section which appears before the Contents page.

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

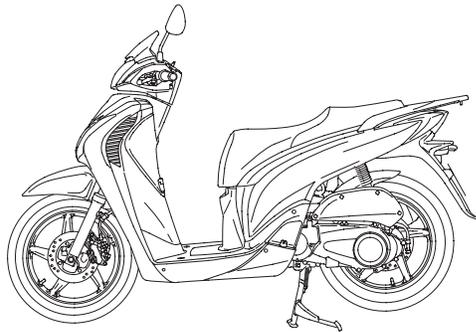




09/08/05 17:20:40 32KTGC00_003



Honda SH125/150CRF OWNER'S MANUAL



**All information in this publication is based on the latest production information available at the time of approval for printing. Honda Motor Co.,Ltd. reserves the right to make changes at any time without notice and without incurring any obligation.
No part of this publication may be reproduced without written permission.**





09/08/05 17:20:47 32KTGC00_004



WELCOME

The scooter presents you a challenge to master the machine, a challenge to adventure. You ride through the wind, linked to the road by a vehicle that responds to your commands as no other does. Unlike an automobile, there is no metal cage around you. Like an airplane, a pre-ride inspection and regular maintenance are essential to your safety. Your reward is freedom.

To meet the challenges safely, and to enjoy the adventure fully, you should become thoroughly familiar with this owner's manual BEFORE YOU RIDE THE SCOOTER.

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

When service is required, remember that your Honda dealer knows your scooter best. If you have the required mechanical "know-how" and tools, your dealer can supply you with an Official Honda Shop Manual to help you perform many maintenance and repair tasks.

Pleasant riding, and thank you for choosing a Honda !





09/08/05 17:20:51 32KTGC00_005



- The following code in this manual indicates the country.

VN | Vietnam

- The specifications may vary with each locale.





09/08/05 17:20:56 32KTGC00_006



A FEW WORDS ABOUT SAFETY

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

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

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

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

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

These signal words mean:





⚠ DANGER

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

⚠ WARNING

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

⚠ CAUTION

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

- **Safety Headings** — such as Important Safety Reminders or Important Safety Precautions.
- **Safety Section** — such as Scooter Safety.
- **Instructions** — how to use this scooter correctly and safely.

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





OPERATION

page

1 SCOOTER SAFETY

- 1 IMPORTANT SAFETY INFORMATION
- 2 PROTECTIVE APPAREL
- 5 LOADING AND ACCESSORIES

10 PARTS LOCATION

- 13 INSTRUMENTS AND INDICATORS

21 MAJOR COMPONENTS

(Information you need to operate this scooter)

- 21 SUSPENSION
- 22 BRAKES
- 25 COOLANT
- 27 FUEL
- 30 ENGINE OIL
- 31 TUBELESS TYRES

page

37 ESSENTIAL INDIVIDUAL COMPONENTS

- 37 IGNITION SWITCH
- 38 KEYS
- 39 RIGHT HANDLEBAR CONTROLS
- 40 LEFT HANDLEBAR CONTROLS





09/08/05 17:21:26 32KTGC00_009



page

41 FEATURES

(Not required for operation)

- 41 STEERING LOCK
- 42 SEAT LOCK
- 43 HELMET HOLDER
- 44 DOCUMENT COMPARTMENT
- 45 CENTER COMPARTMENT
- 46 SHOPPING HOOK
- 47 FRONT COVER
- 48 HEADLIGHT AIM VERTICAL ADJUSTMENT

page

49 OPERATION

- 49 PRE-RIDE INSPECTION
- 50 STARTING THE ENGINE
- 54 RUNNING-IN
- 55 RIDING
- 63 PARKING
- 64 ANTI-THEFT TIPS





MAINTENANCE

page

65 MAINTENANCE

- 65 THE IMPORTANCE OF MAINTENANCE
- 66 MAINTENANCE SAFETY
- 67 SAFETY PRECAUTIONS
- 68 MAINTENANCE SCHEDULE
- 71 TOOL KIT
- 72 SERIAL NUMBERS
- 73 AIR CLEANER
- 75 BELT CASE AIR CLEANER
- 77 CRANKCASE BREATHER
- 78 ENGINE OIL
- 83 SPARK PLUG
- 86 COOLANT
- 87 THROTTLE OPERATION
- 88 FRONT AND REAR SUSPENSION INSPECTION
- 89 BRAKE PAD WEAR
- 91 BATTERY
- 93 FUSE REPLACEMENT
- 96 BULB REPLACEMENT

page

104 CLEANING

108 STORAGE GUIDE

- 108 STORAGE
- 110 REMOVAL FROM STORAGE

111 TAKING CARE OF THE UNEXPECTED

112 SPECIFICATIONS

116 CATALYTIC CONVERTER





SCOOTER SAFETY

IMPORTANT SAFETY INFORMATION

Your scooter can provide many years of service and pleasure – if you take responsibility for your own safety and understand the challenges that you can meet on the road.

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

Always Wear a Helmet

It's a proven fact: helmets significantly reduce the number and severity of head injuries. So always wear an approved motorcycle helmet and make sure your passenger does the same. We also recommend that you wear eye protection, sturdy boots, gloves, and other protective gear (page 2).

Make Yourself Easy to See

Some drivers do not see scooters because they are not looking for them. To make yourself more visible, wear bright reflective clothing, position yourself so other drivers can see you, signal before turning or changing lanes, and use your horn when it will help others notice you.

Ride Within Your Limits

Pushing the limits is another major cause of scooter crashes. 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.





Don't Drink and Ride

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

Keep Your Bike in Safe Condition

For safe riding, it's important to inspect your scooter before every ride and perform all recommended maintenance. Never exceed load limits, and only use accessories that have been approved by Honda for this scooter. See page 5 for more details.

PROTECTIVE APPAREL

For your safety, we strongly recommend that you always wear an approved motorcycle helmet, eye protection, boots, gloves, trousers, and a long-sleeved shirt or jacket whenever you ride. Although complete protection is not possible, wearing proper gear can reduce the chance of injury when you ride.

Following are suggestions to help you choose proper gear.

⚠ WARNING

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

Be sure you and your passenger 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 securely. A bright-coloured helmet can make you more noticeable in traffic, as can reflective strips.

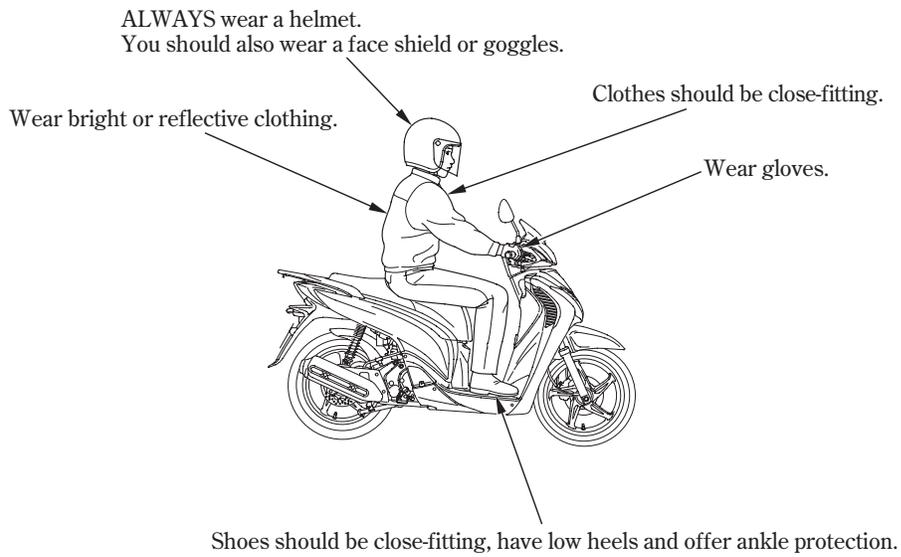
An open-face helmet offers some protection, but a full-face helmet offers more. Always wear a face shield or goggles to protect your eyes and help your vision.

Additional Riding Gear

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

- Sturdy boots with non-slip soles to help protect your feet and ankles.
- Leather gloves to keep your hands warm and help prevent blisters, cuts, burns and bruises.
- A motorcycle riding suit or jacket for comfort as well as protection. Bright-coloured and reflective clothing can help make you more noticeable in traffic. Be sure to avoid loose clothes that could get caught on any part of your scooter.







LOADING AND ACCESSORIES

Your scooter has been designed to carry you and one passenger. When you carry a passenger, you may feel some difference during acceleration and braking. But so long as you keep your scooter well-maintained, with good tyres and brakes, you can safely carry loads within the given guidelines.

However, excessive weight or carrying an unbalanced load can seriously affect your scooter's handling, braking and stability. Non-Honda accessories, improper modifications, and poor maintenance can also reduce your safety margin.

The following pages give more specific information on loading, accessories and modifications.

Loading

How much weight you put on your scooter, and how you load it, are important to your safety. Anytime you ride with a passenger or cargo you should be aware of the following information.

WARNING

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

Follow all loading guidelines in this manual.





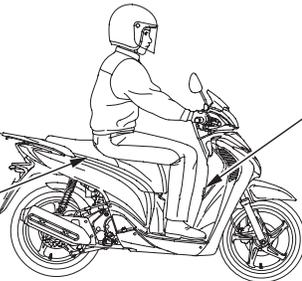
Putting too much weight in individual storage compartments can also affect stability and handling. So be sure to stay within the limits given below:

Maximum weight:	
in center compartment:	10 kg (22 lb)
shopping hook:	1.5 kg (3.3 lb)
rear carrier:	3.0 kg (6.6 lb)



Rear carrier:
weight limit:
3.0 kg (6.6 lb)

Center compartment:
weight limit:
10 kg (22 lb)



Shopping hook:
weight limit:
1.5 kg (3.3 lb)





Loading Guidelines

Your scooter is primarily intended for transporting you and a passenger. You may wish to secure a jacket or other small items to the seat when you are not riding with a passenger.

If you wish to carry more cargo, check with your Honda dealer for advice, and be sure to read the information regarding accessories on page 8 .

Improperly loading your scooter can affect its stability and handling. Even if your scooter is properly loaded, you should ride at reduced speeds whenever carrying cargo.

Follow these guidelines whenever you carry a passenger or cargo:

- Check that both tyres are properly inflated (page 31).
- If you change your normal load, you may need to adjust the rear suspension (page 21).
- To prevent loose items from creating a hazard, make sure the center compartment is closed and that any other cargo is securely tied down before you ride away.
- Place cargo weight as close to the center of the scooter as possible.
- Balance cargo weight evenly on both sides.





Accessories and Modifications

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

WARNING

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

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

Accessories

We strongly recommend that you use only Honda Genuine Accessories that have been specifically designed and tested for your scooter. 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 these guidelines:

- Make sure the accessory does not obscure any lights, reduce ground clearance and banking angle, limit suspension travel or steering travel, alter your riding position or interfere with operating any controls.
- Be sure electrical equipment does not exceed the scooter's electrical system capacity (page 115). A blown fuse can cause a loss of lights or engine power.





- Do not pull a trailer or sidecar with your scooter. This scooter was not designed for these attachments, and their use can seriously impair your scooter's handling.

Modifications

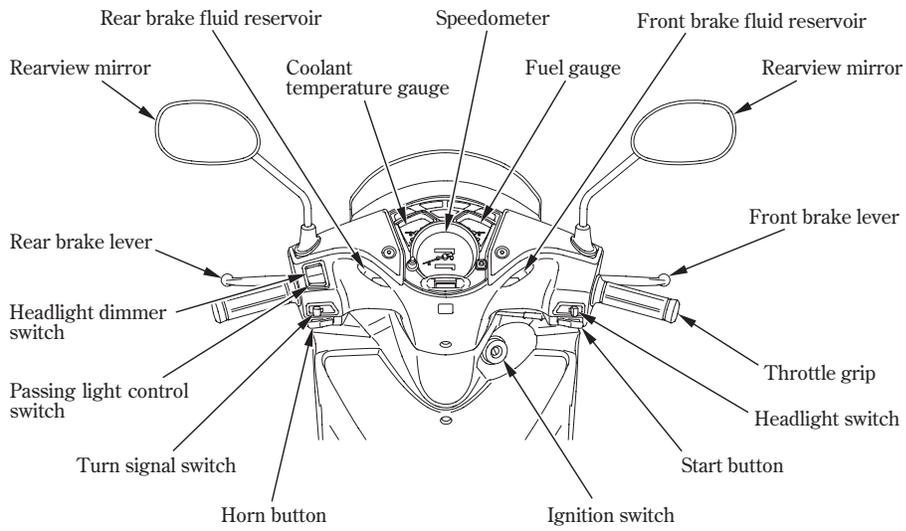
We strongly advise you not to remove any original equipment or modify your scooter in any way that would change its design or operation. Such changes could seriously impair your scooter's handling, stability and braking, making it unsafe to ride.

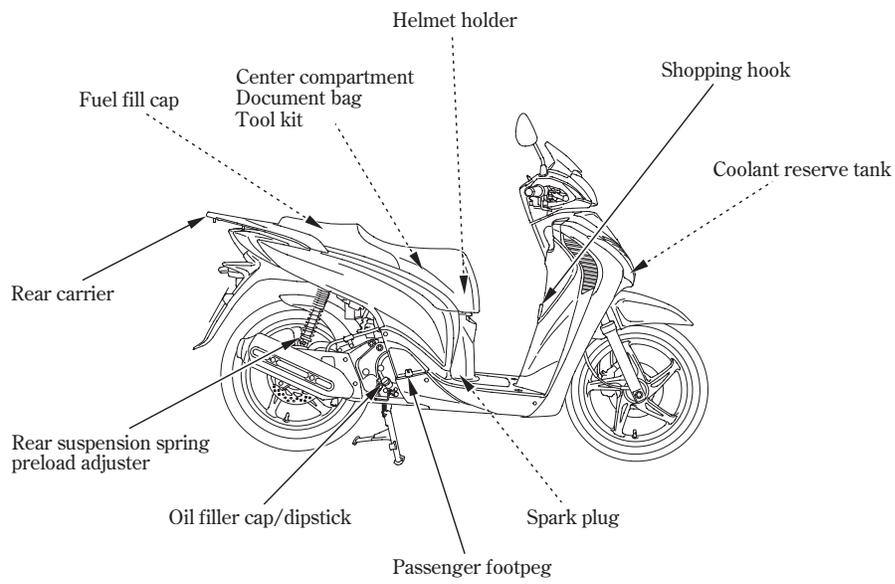
Removing or modifying your lights, mufflers, emission control system or other equipment can also make your scooter illegal.

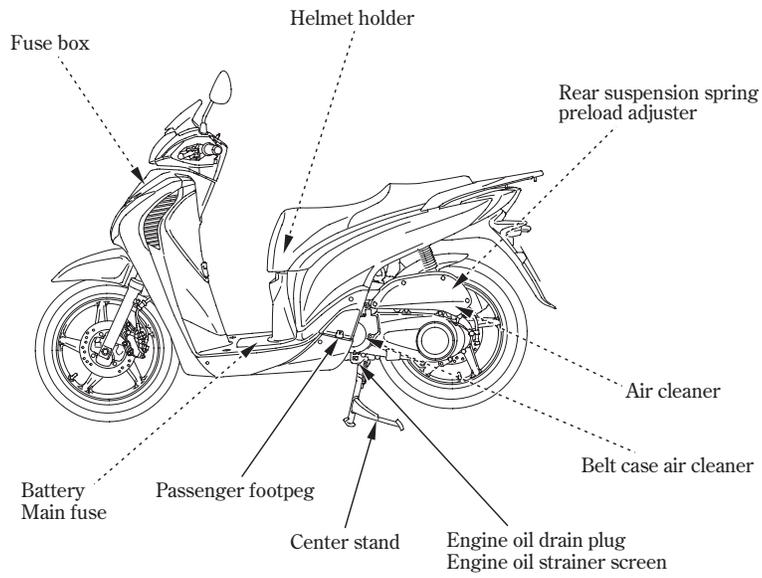




PARTS LOCATION





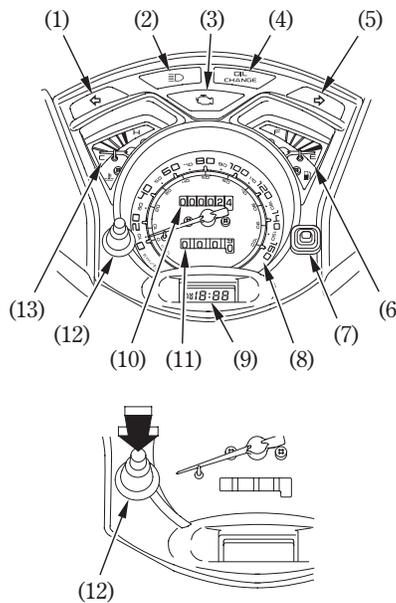




INSTRUMENTS AND INDICATORS

The indicators are contained in the instrument panel. Their functions are described in the tables on the following pages.

- (1) Left turn signal indicator
- (2) High beam indicator
- (3) PGM-FI malfunction indicator lamp (MIL)
- (4) Oil change indicator
- (5) Right turn signal indicator
- (6) Fuel gauge
- (7) CLOCK/OIL button
- (8) Speedometer
- (9) Digital clock
- (10) Odometer
- (11) Tripmeter
- (12) Tripmeter reset knob
- (13) Coolant temperature gauge





(Ref.No.) Description	Function
(1) Left turn signal indicator (green)	Flashes when the left turn signal operates.
(2) High beam indicator (blue)	Lights when the headlight is on high beam.
(3) PGM-FI malfunction indicator lamp (MIL) (amber)	Lights when there is any abnormality in the PGM-FI (Programmed Fuel Injection) system. Should also light for a few seconds and then go off when the ignition switch is turned ON. If it comes on at any other time, reduce speed and take the scooter to your Honda dealer as soon as possible.
(4) Oil change indicator (amber)	Lights when specified maintenance interval for engine oil change is reached (page 19).
(5) Right turn signal indicator (green)	Flashes when the right turn signal operates.





(Ref.No.)	Description	Function
(6)	Fuel gauge	Shows approximate fuel supply available (page 17).
(7)	CLOCK/OIL button	This button is used to adjust the time (page 18). This button is also used to reset the oil change indicator (page 19).
(8)	Speedometer	Shows riding speed.
(9)	Digital clock	Shows hour and minute (page 18).
(10)	Odometer	Shows accumulated mileage.
(11)	Tripmeter	Shows mileage per trip.
(12)	Tripmeter reset knob	Resets tripmeter to zero (0) by pushing the knob.
(13)	Coolant temperature gauge	Shows coolant temperature (page 16).





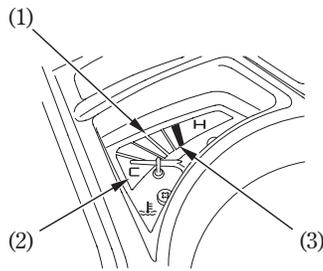
Coolant Temperature Gauge

The coolant temperature gauge (1) shows coolant temperature.

When the needle begins to move above the C (Cold) mark (2), the engine is warm enough for the scooter to be ridden. The normal operating temperature range is within the section between the H and C marks. If the needle reaches the red band (3), stop the engine and check the reserve tank coolant level. Read pages 25 – 26 and do not ride the scooter until the problem has been corrected.

NOTICE

Exceeding maximum running temperature may cause serious engine damage.



- (1) Coolant temperature gauge
- (2) C (Cold) mark
- (3) Red band

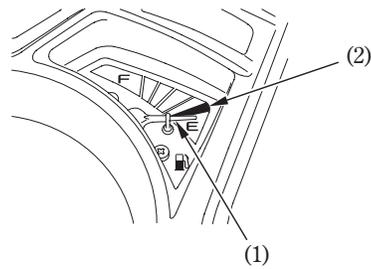




Fuel Gauge

When the fuel gauge needle (1) enters the red band (2), fuel will be low and you should refill the tank as soon as possible. The amount of fuel left in the tank with the vehicle set upright when the fuel gauge needle enters the red band is approximately:

2.0 ℓ (0.53 US gal , 0.44 Imp gal)



- (1) Fuel gauge needle
- (2) Red band



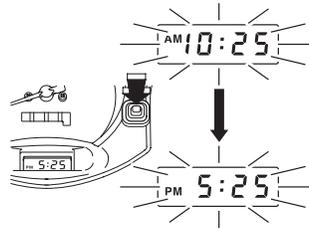
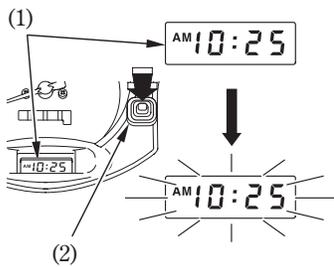


Digital Clock

Shows hour and minute. To adjust the time, proceed as follows:

1. Turn the ignition switch ON.
2. Press and hold the CLOCK/OIL button (2) for more than 2 seconds. The clock will be set in the adjust mode with the display flashing.

3. Press the CLOCK/OIL button until the desired time and AM/PM are displayed.
 - The time is advanced by one minute, each time the button is pressed.
 - The time is advanced by ten minutes, when the button is pressed and held.



4. To end the adjustment, press the CLOCK/OIL button 5 seconds after the last adjustment, or turn the ignition switch OFF.

- (1) Digital clock
(2) CLOCK/OIL button

The clock will be reset AM 1:00 if the battery is disconnected.





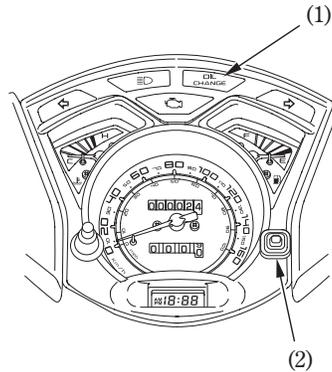
Oil Change Indicator

The oil change indicator (1) lights when the mileage on your scooter approaches the oil change interval specified on the maintenance schedule (page 69).

After changing the engine oil, reset the indicator as follows:

1. Turn the ignition switch OFF.
2. Press and hold the CLOCK/OIL button (2) while simultaneously turning the ignition switch to ON.
3. Continue to hold the CLOCK/OIL button for more than 2 seconds. The indicator will disappear.

If the oil is changed before the oil change indicator appears, be sure to reset the oil change indicator after changing the oil. The indicator will appear for 2 seconds, then disappear. This means the indicator is reset.



- (1) Oil change indicator
- (2) CLOCK/OIL button





09/08/05 17:24:06 32KTGC00_030



NOTICE

The first oil change is at 1,000 km (600 miles), but in this case the indicator should not be reset. The indicator will start blinking after the scooter has covered approximately 4,000 km (2,500 miles). Therefore, after the second engine oil change, as described in the maintenance schedule (page 69), remember to reset the oil change indicator (page 19).





MAJOR COMPONENTS (Information you need to operate this scooter)

SUSPENSION

Each shock absorber (1) has 3 adjustment positions for different load or riding conditions.

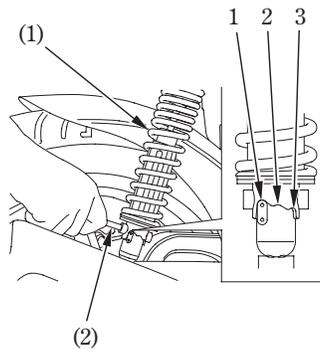
Use a handlebar (2) to adjust the rear shocks.

Always adjust the shock absorber position in sequence (1-2-3 or 3-2-1).

Attempting to adjust directly from 1 to 3 or 3 to 1 may damage the shock absorber.

Position 1 is for light loads and smooth road conditions. Positions 2 to 3 increase spring preload for a stiffer rear suspension, and can be used when the scooter is heavily loaded. Be certain to adjust both shock absorbers to the same position.

Standard position: 1



- (1) Shock absorber
- (2) Handlebar





BRAKES **Combined Brake System (CBS)**

This scooter is equipped with a Combined Brake System. Operating the rear brake lever applies the rear brake and a portion of the front brake. For full braking effectiveness, use both the front and rear brake lever simultaneously, as you would with a conventional scooter braking system.

As with a conventional scooter braking system, excessively hard application of the brake controls may cause wheel lock, reducing control of the scooter.

For normal braking, apply both the front and rear brake lever to match your road speed. For maximum braking, close the throttle and firmly apply the front and rear brake lever.

Front/Rear Brake

Both the front and rear brakes are the hydraulic disc types.

As the brake pads wear, the brake fluid level drops.

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

If the control lever free travel becomes excessive and the brake pads are not worn beyond the recommended limit (page 89), there is probably air in the brake system and it must be bled. See your Honda dealer for this service.





Front Brake Fluid Level:

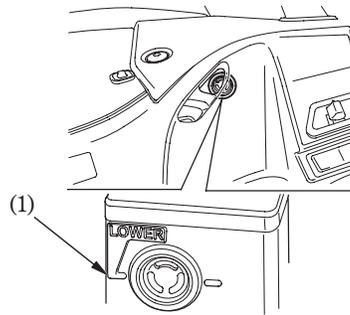
With the scooter in an upright position, check the fluid level. It should be above the LOWER level mark (1). If the level is at or below the LOWER level mark, check the brake pads for wear (page 89).

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

The recommended brake fluid is Honda DOT 3 or DOT 4 brake fluid from a sealed container, or an equivalent.

Other Checks:

Make sure there are no fluid leaks. Check for deterioration or cracks in the hoses and fittings.



(1) LOWER level mark





Rear Brake Fluid Level:

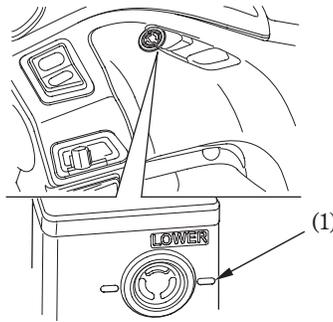
With the scooter in an upright position, check the fluid level. It should be above the LOWER level mark (1). If the level is at or below the LOWER level mark, check the brake pads for wear (page 90).

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

The recommended brake fluid is Honda DOT 3 or DOT 4 brake fluid from a sealed container, or an equivalent.

Other Checks:

Make sure there are no fluid leaks. Check for deterioration or cracks in the hoses and fittings.



(1) LOWER level mark





COOLANT
Coolant Recommendation

Use only genuine HONDA PRE-MIX COOLANT containing corrosion inhibitors, specifically recommended for aluminum engines when adding or replacing the coolant.

Genuine HONDA PRE-MIX COOLANT is excellent at preventing corrosion and overheating. The effects last for up to 2 years.

The coolant should be inspected and replaced properly by following the maintenance schedule (page 69).

Use any genuine HONDA PRE-MIX COOLANT without diluting with water.

NOTICE

Do not use non-ethylene glycol coolant, tap water, nor mineral water when adding or replacing the coolant.

Use of improper coolant may cause damage, such as corrosions in the engine, blockage of the cooling passage or radiator and premature wear of the water pump seal.





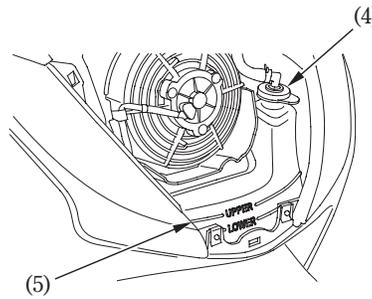
Inspection

The reserve tank (1) is behind the front cover (2).

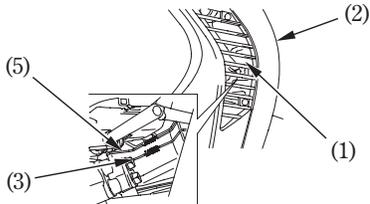
Check the coolant level in the reserve tank while the engine is at the normal operating temperature with the scooter in an upright position. If the coolant level is below the LOWER level mark (3), remove the front cover (page 47) and reserve tank cap (4), and add coolant mixture until it reaches the UPPER level mark (5).

Always add coolant to the reserve tank. Do not attempt to add coolant by removing the radiator cap.

If the reserve tank is empty, or if coolant loss is excessive, check for leaks and see your Honda dealer for repair.



(4) Reserve tank cap
(5) UPPER level mark



(1) Reserve tank (2) Front cover
(3) LOWER level mark





FUEL

Fuel Tank

The fuel tank is located under the seat. Fuel tank capacity is:

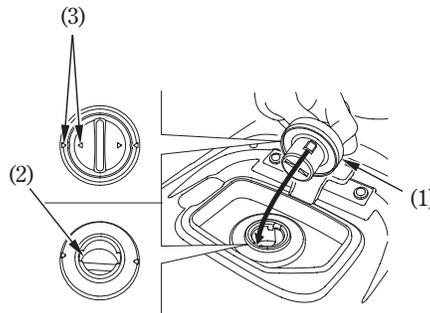
7.5 ℓ (1.98 US gal , 1.65 Imp gal)

To open the fuel fill cap (1), unlock and lift up the seat (page 42), then remove the fuel fill cap by turning it counterclockwise.

⚠ WARNING

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

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



(1) Fuel fill cap
(2) Filler neck

(3) Arrow marks





09/08/05 17:24:57 32KTGC00_038



Do not overfill the tank. There should be no fuel in the filler neck (2).
After refueling, be sure to tighten the fuel fill cap firmly by turning it clockwise. Make sure that the arrow marks (3) on the fuel fill cap and fuel tank are aligned. Close the seat.

Use unleaded petrol with a research octane number of 91 or higher.
The use of leaded petrol will cause premature damage to the catalytic converter.

NOTICE

If “spark knock” or “pinking” occurs at a steady engine speed under normal load, change brands of petrol. If spark knock or pinking persists, consult your Honda dealer. Failure to do so is considered misuse, and damage caused by misuse is not covered by Honda’s Limited Warranty.





Petrol Containing Alcohol

If you decide to use a petrol containing alcohol (gasohol), be sure it's octane rating is at least as high as that recommended by Honda. There are two types of "gasohol": one containing ethanol, and the other containing methanol. Do not use petrol that contains more than 10 % ethanol. Do not use petrol containing methanol (methyl or wood alcohol) that does not also contain cosolvents and corrosion inhibitors for methanol. Never use petrol containing more than 5 % methanol, even if it has cosolvents and corrosion inhibitors.

The use of petrol containing more than 10 % ethanol (or more than 5 % methanol) may:

- Damage the painting of the fuel tank.
- Damage the rubber tubes of the fuel line.
- Cause corrosion of the fuel tank.
- Cause poor drivability.

Before buying fuel from an unfamiliar station, try to find out if the fuel contains alcohol. If it does, confirm the type and percentage of alcohol used. If you notice any undesirable operating symptoms while using a petrol that contains alcohol, or one that you think contains alcohol, switch to a petrol that you know does not contain alcohol.





ENGINE OIL

Engine Oil Level Check

Check the engine oil level each day before riding the scooter.

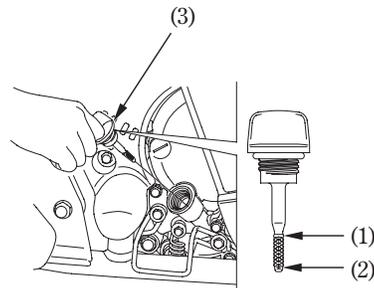
The level must be maintained between the upper (1) and lower (2) level marks on the oil filler cap/dipstick (3).

1. Start the engine and let it idle for 3–5 minutes.
2. Stop the engine and put the scooter on its center stand on level ground.
3. After 2–3 minutes, remove the oil filler cap/dipstick, wipe it clean, and reinsert the oil filler cap/dipstick without screwing it in. Remove the oil filler cap/dipstick. The oil level should be between the upper and lower level marks on the oil filler cap/dipstick.
4. If required, add the specified oil (see page 78) up to the upper level mark. Do not overfill.

5. Reinstall the oil filler cap/dipstick. Check for oil leaks.

NOTICE

Running the engine with insufficient oil pressure may cause serious engine damage.



- (1) Upper level mark
- (2) Lower level mark
- (3) Oil filler cap/dipstick





TUBELESS TYRES

To safely operate your scooter, your tyres must be the proper type and size, in good condition with adequate tread, and correctly inflated for the load you are carrying. The following pages give more detailed information on how and when to check your air pressure, how to inspect your tyres for damage, and what to do when your tyres need to be repaired or replaced.

Air Pressure

Keeping your tyres properly inflated provides the best combination of handling, tread life and riding comfort. Generally, underinflated tyres wear unevenly, adversely affect handling, and are more likely to fail from being overheated. Overinflated tyres make your scooter ride harshly, are more prone to damage from road hazards, and wear unevenly.



WARNING

Using tyres 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 tyre inflation and maintenance.

We recommend that you visually check your tyres before every ride and use a gauge to measure air pressure at least once a month or any time you think the tyres might be low.

Tubeless tyres have some self-sealing ability if they are punctured. However, because leakage is often very slow, you should look closely for punctures whenever a tyre is not fully inflated.





Always check air pressure when your tyres are “cold” — when the scooter has been parked for at least three hours. If you check air pressure when your tyres are “warm” — when the scooter has been ridden for even a few miles — the readings will be higher than if the tyres were “cold”. This is normal, so do not let air out of the tyres to match the recommended cold air pressures given below. If you do, the tyres will be underinflated.

The recommended “cold” tyre pressures are:

kPa (kgf/cm ² , psi)		
Driver only	Front	175 (1.75 , 25)
	Rear	200 (2.00 , 29)
Driver and one passenger	Front	175 (1.75 , 25)
	Rear	225 (2.25 , 33)

Inspection

Whenever you check the tyre pressures, you should also examine the tyre treads and sidewalls for wear, damage, and foreign objects:

Look for:

- Bumps or bulges in the side of the tyre or the tread. Replace the tyre if you find any bumps or bulges.
- Cuts, splits or cracks in the tyre. Replace the tyre if you can see fabric or cord.
- Excessive tread wear.

Also, if you hit a pothole or hard object, pull to the side of the road as soon as you can safely and carefully inspect the tyres for damage.

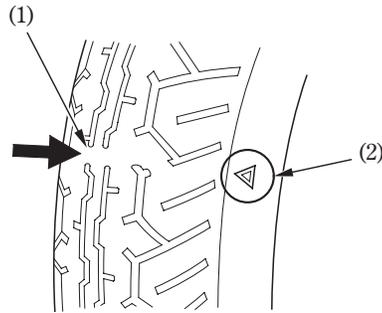




Tread Wear

Replace tyres before tread depth at the center of the tyre reaches the following limit:

Minimum tread depth	
Front:	1.5 mm (0.06 in)
Rear:	2.0 mm (0.08 in)



- (1) Wear indicator
- (2) Wear indicator location mark





Tyre Repair

If a tyre is punctured or damaged, you should replace it, not repair it. As discussed below, a tyre that is repaired, either temporarily or permanently, will have lower speed and performance limits than a new tyre.

A temporary repair, such as an external tubeless tyre plug, may not be safe for normal speeds and riding conditions. If a temporary or emergency repair is made to a tyre, you should ride slowly and cautiously to a dealer and have the tyre replaced. If possible, you should not carry a passenger or cargo until a new tyre is installed.

Even if a tyre is professionally repaired with a permanent internal patch plug, it will not be as good as a new tyre. You should not exceed 60 km/h (40 mph) for the first 24 hours. In addition, you may not be able to safely carry as much weight as with a new tyre. Therefore, we strongly recommend that you replace a damaged tyre. If you choose to have a tyre repaired, be sure the wheel is balanced before you ride.





Tyre Replacement

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

WARNING

Installing improper tyres on your scooter 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 tyres recommended in this owner's manual.

The recommended tyres for your scooter are:

Front: 100/80-16M/C 50P
DUNLOP
D451
IRC
SS-530F

Rear: 120/80-16M/C 60P
DUNLOP
D451
IRC
SS-530R

Type: bias-ply, tubeless

Whenever you replace a tyre, use one that is equivalent to the original and be sure the wheel is balanced after the new tyre is installed.





09/08/05 17:25:49 32KTGC00_046



Important Safety Reminders

- Do not install a tube inside a tubeless tyre on this scooter. Excessive heat build-up can cause the tube to burst.
- Use only tubeless tyres on this scooter. The rims are designed for tubeless tyres, and during hard acceleration or braking, a tube-type tyre could slip on the rim and cause the tyre to rapidly deflate.

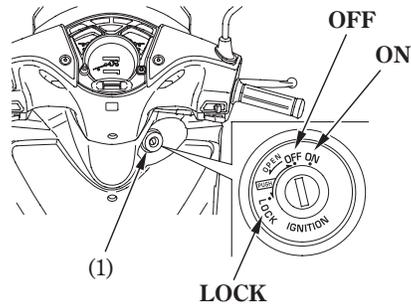




ESSENTIAL INDIVIDUAL COMPONENTS

IGNITION SWITCH

The ignition switch (1) is on the right side below the steering stem.



(1) Ignition switch

Key Position	Function	Key Removal
LOCK (steering lock)	Steering is locked. Engine and lights cannot be operated.	Key can be removed
OFF	Engine and lights cannot be operated.	Key can be removed
ON	Engine and lights can be operated.	Key cannot be removed



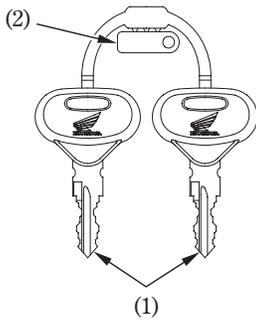


KEYS

This scooter has two keys (1) and a key number plate (2).

You will need the key number if you ever have to replace a key. Store the plate in a safe place.

To reproduce keys, bring all keys, key number plate and scooter to your Honda dealer.



(1) Keys

(2) Key number plate





RIGHT HANDLEBAR CONTROLS

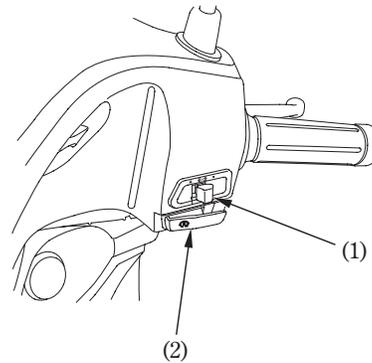
Headlight Switch

The headlight switch (1) has three positions; ☼, ☽ and OFF marked by a dot to the right of ☽.

☼ : Headlight, taillight, position light, license light and meter lights on.

☽ : Position light, taillight, license light and meter lights on.

- (OFF): Headlight, taillight, position light, license light and meter lights off.



- (1) Headlight switch
- (2) Start button

Start Button

The start button (2) is next to the throttle grip.

When the start button is pressed, the starter motor cranks the engine. See page 50 for the starting procedure.





LEFT HANDLEBAR CONTROLS

Headlight Dimmer Switch (1)

Push the headlight dimmer switch to  (HI) to select high beam or to  (LO) to select low beam.

Passing Light Control Switch (2)

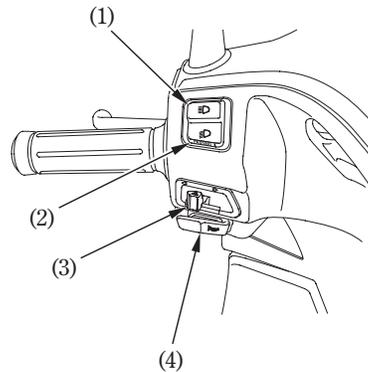
When this switch is pressed, the headlight flashes on to signal approaching cars or when passing.

Turn Signal Switch (3)

Move to  (L) to signal a left turn,  (R) to signal a right turn. Press to turn signal off.

Horn Button (4)

Press the button to sound the horn.



- (1) Headlight dimmer switch
- (2) Passing light control switch
- (3) Turn signal switch
- (4) Horn button





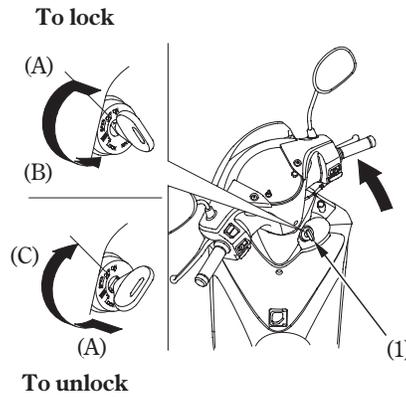
FEATURES (Not required for operation)

STEERING LOCK

To lock the steering, turn the handlebars all the way to the left, turn the key (1) to LOCK while pushing in. Remove the key.

To unlock the steering, turn the key to OFF while pushing in.

Do not turn the ignition switch to LOCK while riding the scooter; loss of vehicle control will result.



(1) Ignition key

(A) Push in
(B) Turn to LOCK
(C) Turn to OFF





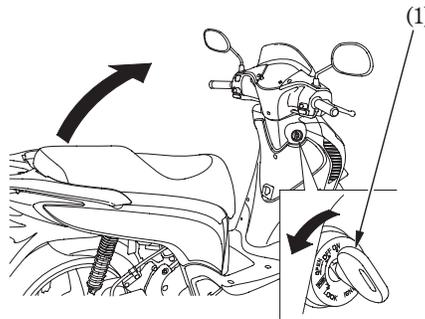
SEAT LOCK

The seat lock is in the ignition switch.

To open the seat, insert the ignition key (1) and turn it to the OFF position while pushing in, then turn it counterclockwise to unlock.

Pull the seat up.

To lock the seat, lower and push down on it until it locks. Make sure the seat is secure before riding.



(1) Ignition key



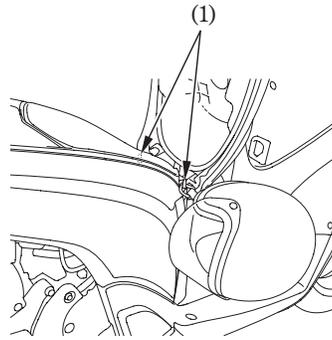


HELMET HOLDER

The helmet holders (1) are on the left and right side below the seat. The helmet holders are designed to secure your helmet while parked.

Open the seat (page 42).

Hang your helmet on the hooks at the seat hinge and lower the seat to lock. To remove a helmet, unlock the seat. Lift the helmet off the holder and lower the seat, making sure it securely locked before riding.



(1) Helmet holders

⚠ WARNING

Riding with a helmet attached to the holder can interfere with the rear wheel or suspension and could cause a crash in which you can be seriously hurt or killed.

Use the helmet holder only while parked. Do not ride with a helmet secured by the holder.





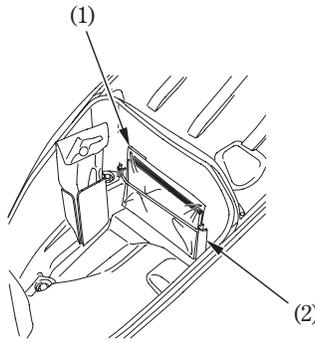
DOCUMENT COMPARTMENT

The document bag (1) is in the document compartment (2), located under the seat.

Open the seat (page 42).

This owner's manual and other documents should be stored in this compartment.

When washing your scooter, be careful not to flood this area with water.



- (1) Document bag
- (2) Document compartment





CENTER COMPARTMENT

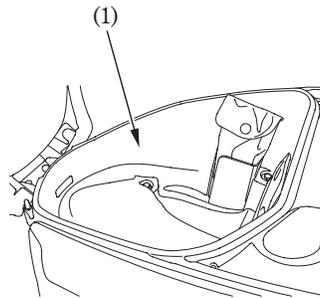
The center compartment (1) is below the seat. Opening and closing: See "SEAT LOCK" (page 42).

MAXIMUM WEIGHT LIMIT:
10 kg (22 lb)

Never exceed the maximum weight limit; handling and stability may be severely affected.

The center compartment may become heated by the engine. Do not store food and other articles which are flammable or susceptible to heat damage in this compartment.

Do not direct water under pressure against the center compartment as water will be forced into the compartment.



(1) Center compartment





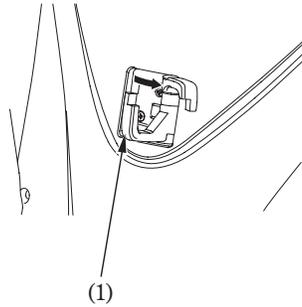
SHOPPING HOOK

The shopping hook (1) is provided below the handlebar.

MAXIMUM WEIGHT LIMIT:

1.5 kg (3.3 lb)

Do not attach large luggage to the hook that would hang out from the scooter and/or interfere with the movement of your feet.



(1) Shopping hook





FRONT COVER

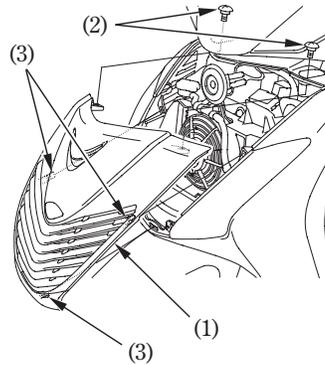
The front cover (1) must be removed to service the coolant and fuse.

Removal:

1. Remove the screws (2).
2. Release the hooks (3), then remove the front cover.

Installation:

- Installation can be done in the reverse order of removal.



(1) Front cover
(2) Screws

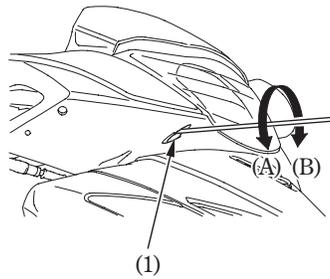
(3) Hooks





HEADLIGHT AIM VERTICAL ADJUSTMENT

Vertical adjustment can be made by turning the screw (1) in or out as necessary. Obey local laws and regulations.



(1) Screw

(A) Up
(B) Down





OPERATION

PRE-RIDE INSPECTION

For your safety, it is very important to take a few moments before each ride to walk around your scooter and check its condition. If you detect any problem, be sure you take care of it, or have it corrected by your Honda dealer.

WARNING

Improperly maintaining this scooter 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.

1. Engine oil level—add engine oil if required (page 78). Check for leaks.
2. Fuel level—fill fuel tank when necessary (page 27). Check for leaks.
3. Coolant level—add coolant if required. Check for leaks (pages 25 – 26).
4. Front and rear brakes—check operation; make sure there is no brake fluid leakage (pages 22 – 24).
5. Tyres—check condition and pressure (pages 31 – 36).
6. Throttle—check for smooth opening and full closing in all steering positions.
7. Lights and horn—check that headlight, brake/tail light, position light, license light, turn signals, indicators and horn function properly.





STARTING THE ENGINE

Always follow the proper starting procedure described below.

This scooter has an automatic fuel valve.

To protect the catalytic converter in your scooter's exhaust system, avoid extending idling and the use of leaded petrol.

Your scooter's exhaust contains poisonous carbon monoxide gas. High levels of carbon monoxide can collect rapidly in enclosed areas such as a garage. Do not run the engine with the garage door closed. Even with the door open, run the engine only long enough to move your scooter out of the garage.

Do not use the electric starter for more than 5 seconds at a time. Release the start button for approximately 10 seconds before pressing it again.

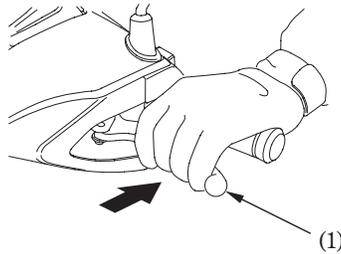




This scooter has a fuel-injected engine with an automatic choke. Follow the procedure indicated below.

1. Place the scooter on its center stand.
2. Squeeze the rear brake lever (1).

The electric starter will only work when the rear brake lever is pulled in.



(1) Rear brake lever

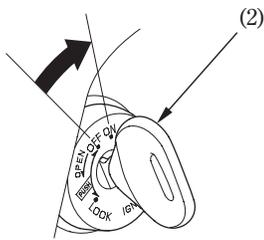




3. Turn the ignition switch (2) to ON.

Confirm the following:

- The PGM-FI malfunction indicator lamp (MIL) is OFF.

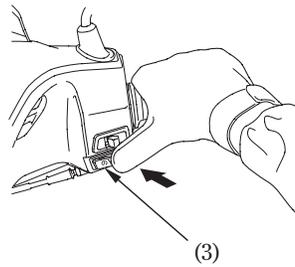


(2) Ignition switch

4. With the throttle completely closed, press the start button (3).

The engine will not start if the throttle is fully open (because the electronic control module cuts off the fuel supply).

Do not use the electric starter for more than 5 seconds at a time. Release the start button for approximately 10 seconds before pressing it again.



(3) Start button





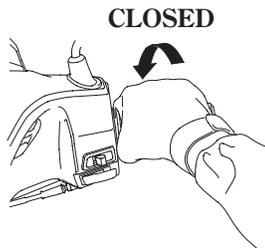
5. Be sure to keep the throttle closed and the rear brake lever applied while starting and warming up the engine.
6. Allow the engine to warm up before riding (See **“RIDING”**, page 55).

Do not “BLIP” the throttle (open and close rapidly) as the scooter will move forward suddenly, causing possible loss of control. Do not leave the scooter unattended while the engine is warming up.

Flooded Engine

If the engine fails to start after repeated attempts, it may be flooded.

1. Open the throttle fully.
 2. Press the start button for 5 seconds.
 3. Follow the normal starting procedure.
 4. If the engine starts with unstable idle, open the throttle slightly.
- If the engine does not start, wait for 10 seconds, then follow steps 1–3 again.





09/08/05 17:28:01 32KTGC00_064



Ignition Cut Off

Your scooter is designed to automatically stop the engine and fuel pump if the scooter is over-turned (a banking sensor cuts off the ignition system). Before restarting the engine, you must turn the ignition switch to the OFF position and then back to ON.

RUNNING-IN

Help assure your scooter's future reliability and performance by paying extra attention to how you ride during the first 500 km (300 miles). During this period, avoid full-throttle starts and rapid acceleration.





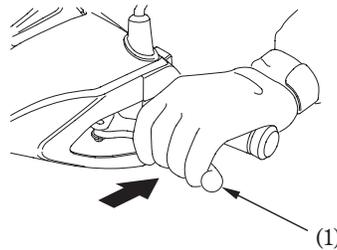
RIDING

Review Scooter Safety (pages 1 – 9)
before you ride.

1. **Make sure the throttle is closed and the rear brake is applied** before moving the scooter off the center stand.

The rear wheel must be locked when moving the scooter off the center stand or loss of control may result.

Make sure flammable materials such as dry grass or leaves do not come in contact with the exhaust system when riding, idling, or parking your scooter.



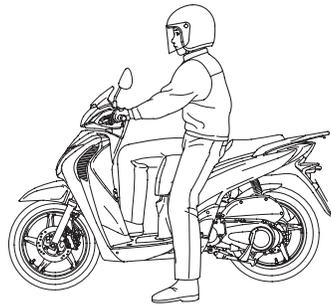
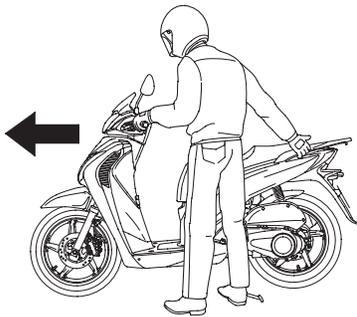
(1) Rear brake lever





2. Stand on the left side of the scooter and push it forward and off the center stand.

3. Mount the scooter from the left side keeping at least one foot on the ground to steady the scooter.

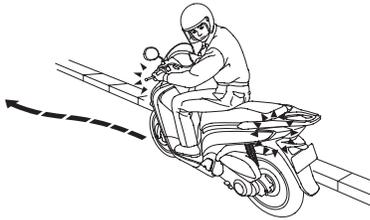
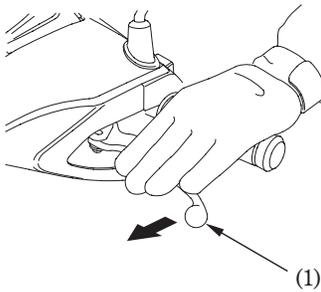




4. Unlock the rear wheel by releasing the rear brake lever (1).

5. **Before starting off**, indicate your direction with the turn signals, and check for safe traffic conditions. Grasp the handlebars firmly with both hands.

Never attempt one-handed operation; loss of vehicle control could result.



(1) Rear brake lever

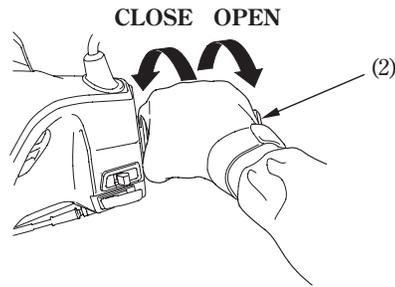




6. **To accelerate**, open the throttle (2) gradually; the scooter will move forward.

Do not “BLIP” the throttle (open and close rapidly) as the scooter will move forward suddenly, causing possible loss of control.

7. **To decelerate**, close the throttle.



(2) Throttle

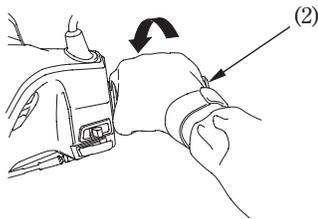




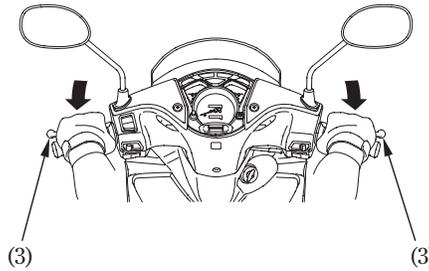
8. When slowing down the scooter, coordination of the throttle (2) and front and rear brakes (3) is most important.

Both front and rear brakes should be applied together. Independent use of only the front or rear brake reduces stopping performance.

Excessive brake application may cause either wheel to lock, reducing control of the scooter.



(2) Throttle



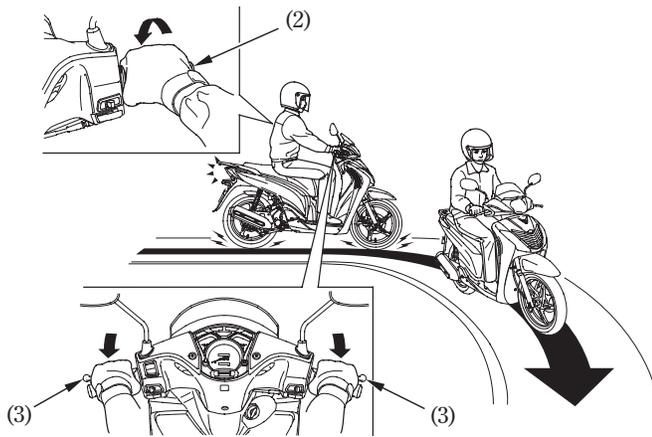
(3) Front and rear brakes





9. When approaching a corner or turn, close the throttle (2) fully, and slow the scooter down by applying both front and rear brakes (3) at the same time.

10. After completing the turn, open the throttle gradually to accelerate the scooter.



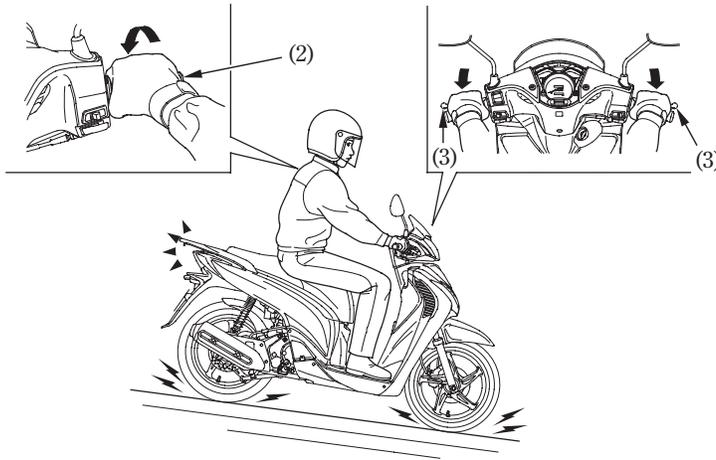
(2) Throttle (3) Front and rear brakes





11. **When descending a steep grade**, close the throttle (2) fully and apply both brakes (3) to slow the scooter.

Avoid continuous use of the brakes, which may result in overheating and reduction of braking efficiency.



(2) Throttle

(3) Front and rear brakes





12. When riding on wet or loose surfaces,
be especially cautious.

When riding in wet or rainy conditions or on loose surfaces, the ability to maneuver and stop will be reduced. For your safety:

- Exercise extreme caution when braking, accelerating or turning.
- Ride at slower speeds and allow for extra stopping distance.
- Keep the scooter as upright as possible.
- Use extreme caution when riding over slippery surfaces such as railroad tracks, iron plates, manhole covers, painted lines, etc.





PARKING

1. After stopping the scooter turn the ignition switch to the "OFF" position and remove the key.
2. Use the center stand to support the scooter while parked.

Park the scooter on firm, level ground to prevent it from falling over.

If you must park on a slight incline, aim the front of the scooter uphill to reduce the possibility of rolling off the center stand or overturning.

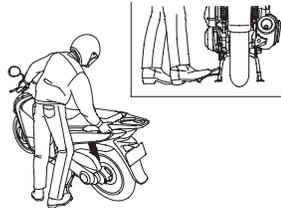
3. Lock the steering to help prevent theft (page 41).

The exhaust pipe and muffler become very hot during operation and remain sufficiently hot to inflict burns if touched even after shutting off the engine.

Make sure flammable materials such as dry grass or leaves do not come in contact with the exhaust system when parking your scooter.



HOW TO USE CENTER STAND





ANTI-THEFT TIPS

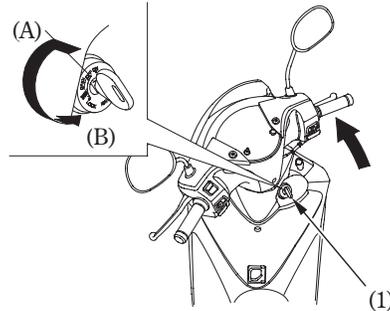
1. Always lock the steering and never leave the key in the ignition switch. This sounds simple but people do forget.
2. Be sure the registration information for your scooter is accurate and current.
3. Park your scooter in a locked garage whenever possible.
4. Use an additional anti-theft device of good quality.
5. Put your name, address, and phone number in this Owner's Manual and keep it on your scooters at all times. Many times stolen scooters are identified by information in the Owner's Manuals that are still with them.

NAME: _____

ADDRESS: _____

PHONE NO: _____

LOCK STEERING



(1) Ignition key

(A) Push in
(B) Turn to lock





MAINTENANCE

THE IMPORTANCE OF MAINTENANCE

A well-maintained scooter is essential for safe, economical and trouble-free riding. It will also help reduce air pollution.

To help you properly care for your scooter, the following pages include a Maintenance Schedule and a Maintenance Record for regularly scheduled maintenance.

These instructions are based on the assumption that the scooter will be used exclusively for its designed purpose. Sustained high speed operation or operation in unusually wet or dusty conditions will require more frequent service than specified in the Maintenance Schedule. Consult your Honda dealer for recommendations applicable to your individual needs and use.

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

WARNING

Improperly maintaining this scooter 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.





MAINTENANCE SAFETY

This section includes instructions on some important maintenance tasks. You can perform some of these tasks with the tools provided – if you have basic mechanical skills.

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

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

WARNING

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

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





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 parts.**
Let the engine and exhaust system cool before touching.
 - * **Injury from moving parts.**
Do not run the engine unless instructed to do so.
- Read the instructions before you begin, and make sure you have the tools and skills required.
- To help prevent the scooter from falling over, park it on a firm, level surface, using the center stand to provide support.

- To reduce the possibility of a fire or explosion, be careful when working around petrol or batteries. Use only nonflammable solvent, not petrol, to clean parts. Keep cigarettes, sparks and flames away from the battery and all fuel-related parts.

Remember that your Honda dealer knows your scooter best and is fully equipped to maintain and repair it.

To ensure the best quality and reliability, use only new Honda Genuine Parts or their equivalents for repair and replacement.





09/08/05 17:29:31 32KTGC00_078



MAINTENANCE SCHEDULE

Perform the Pre-ride Inspection (page 49) at each scheduled maintenance period.

I: INSPECT AND CLEAN, ADJUST, LUBRICATE OR REPLACE IF NECESSARY

C: CLEAN R: REPLACE A: ADJUST L: LUBRICATE

The following items require 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 proper tools and service data and is mechanically qualified. Refer to the Official Honda Shop Manual.
- ** In the interest of safety, we recommend these items be serviced only by your Honda dealer.

Honda recommends that your Honda dealer should road test your scooter after each periodic maintenance is carried out.

- NOTES:
- (1) At higher odometer readings, repeat at the frequency interval established here.
 - (2) Service at every 8,000 km (5,000 mi) or more frequently when riding in unusually wet or dusty areas (cleaning is prohibited).
 - (3) Service more frequently when riding in rain or at full throttle.
 - (4) Replace every 2 years. Replacement requires mechanical skill.





ITEM	FREQUENCY	WHICHEVER → COMES FIRST ↓ NOTE	ODOMETER READING [NOTE (1)]					Refer to page
			× 1,000 km	1	4	8	12	
			× 1,000 mi	0.6	2.5	5	7.5	
* FUEL LINE				I	I	I	—	
* THROTTLE OPERATION				I	I	I	87	
AIR CLEANER	NOTE (2)		EVERY 8,000km(5,000mi):R				73	
CRANKCASE BREATHER	NOTE (3)			C	C	C	77	
SPARK PLUG				I	R	I	83	
* VALVE CLEARANCE				I	I	I	—	
ENGINE OIL				R	R	R	78	
* ENGINE OIL STRAINER SCREEN						C	80	
* ENGINE IDLE SPEED				I	I	I	—	
RADIATOR COOLANT	NOTE (4)				I		25	
* COOLING SYSTEM					I		—	
* SECONDARY AIR SUPPLY SYSTEM						I	—	





ITEM	FREQUENCY	WHICHEVER → COMES FIRST ↓ NOTE	ODOMETER READING [NOTE (1)]					Refer to page
			× 1,000 km	1	4	8	12	
			× 1,000 mi	0.6	2.5	5	7.5	
* DRIVE BELT							—	
BELT CASE AIR CLEANER				C	C	C	75	
* FINAL DRIVE OIL	NOTE (4)						—	
BRAKE FLUID	NOTE (4)			I	I	I	23, 24	
BRAKE PADS WEAR				I	I	I	89, 90	
BRAKE SYSTEM				I	I	I	22, 89, 90	
* BRAKELIGHT SWITCH				I	I	I	—	
* HEADLIGHT AIM				I	I	I	48	
** CLUTCH SHOES WEAR						I	—	
* SUSPENSION					I	I	88	
* NUTS, BOLTS, FASTENERS				I		I	—	
** WHEELS/TYRES				I	I	I	—	
** STEERING HEAD BEARINGS				I		I	—	



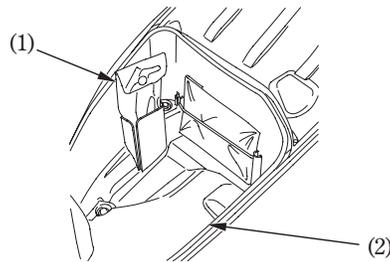


TOOL KIT

The tool kit (1) is in the center compartment (2).

Some roadside repairs, minor adjustments and parts replacement can be performed with the tools contained in the kit.

- 8 × 12 mm Open end wrench
- 10 × 14 mm Open end wrench
- 4 mm Hex wrench
- Spark plug wrench
- Standard/Phillips screwdriver
- Screwdriver handle
- Handlebar
- Fuse 30A
- Fuse puller
- Tool bag



(1) Tool kit
(2) Center compartment





SERIAL NUMBERS

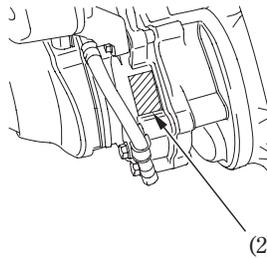
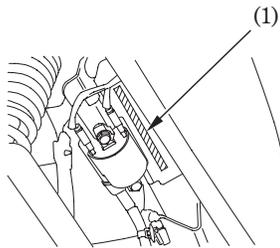
The frame and engine serial numbers are required when registering your scooter. They may also be required by your dealer when ordering replacement parts. Record the numbers here for your reference.

The frame number (1) is stamped on the right side of the frame body.

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

FRAME NO. _____

ENGINE NO. _____



(1) Frame number
72

(2) Engine number





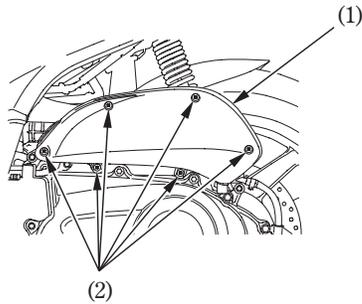
AIR CLEANER

Refer to the Safety Precautions on page 67 .

The air cleaner should be serviced at regular intervals (page 69). Service more frequently when riding in unusually wet or dusty areas.

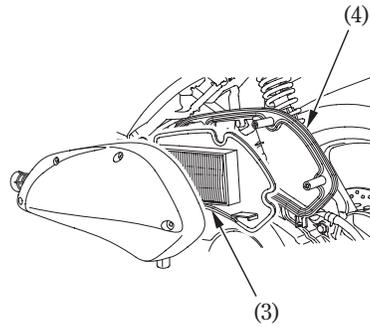
1. Remove the air cleaner housing cover (1) by removing the screws (2).

2. Take out the air cleaner element (3).
3. Thoroughly clean the inside of the air cleaner housing (4).



(1) Air cleaner housing cover

(2) Screws



(3) Air cleaner element

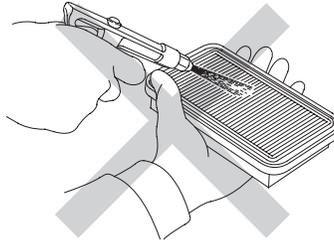
(4) Air cleaner housing





4. Install the new air cleaner element.
Use the Honda Genuine air cleaner element or an equivalent air cleaner element specified for your model. Using the wrong Honda air cleaner element or a non-Honda air cleaner element which is not of equivalent quality may cause premature engine wear or performance problems.
5. Install the removed parts in the reverse order of removal.

This scooter is equipped with a viscous type air cleaner element.
Air blow cleaning or any other cleaning can degrade the viscous element performance and cause the intake of dust.
Do not perform the maintenance.

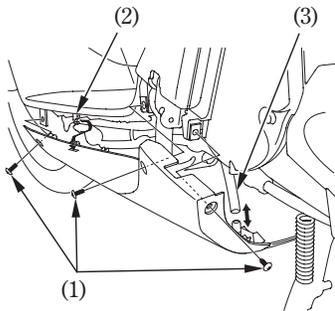




BELT CASE AIR CLEANER

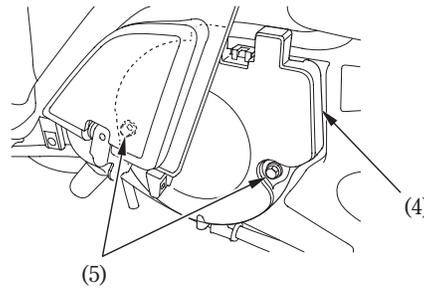
Refer to the Safety Precautions on page 67 .

1. Remove the screws (1) and release the hook (2).
2. Disconnect the drain tube (3).
3. Remove the belt case air cleaner assembly (4) by removing the bolts (5).



(1) Screws
(2) Hook

(3) Drain tube



(4) Belt case air cleaner assembly
(5) Bolts



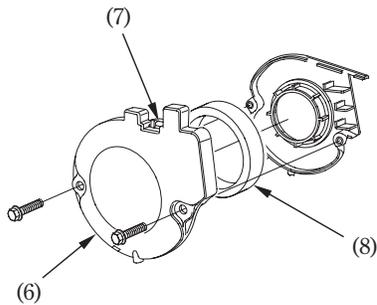


4. Remove the element cover (6) by releasing the tab (7).
5. Remove the element (8).

6. Wash the element in clean, nonflammable or high flash point solvent and let it dry thoroughly.

- Never use petrol or low flash point solvents for cleaning the air cleaner. A fire or explosion could result.
- Allow the element to dry thoroughly before installation.
- Do not apply oil to the element; damage to the drive belt will occur.

7. Installation can be done in the reverse order of removal.



(6) Element cover
(7) Tab

(8) Element



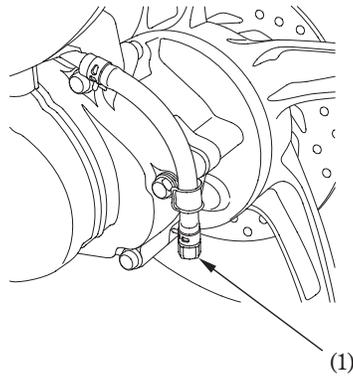


CRANKCASE BREATHER

Refer to the Safety Precautions on page 67 .

1. Remove the crankcase breather tube plug (1) from the tube and drain deposits into a suitable container.
2. Reinstall the crankcase breather tube plug.

Service more frequently when riding in rain, at full throttle, or after the scooter is washed or overturned. Service if the deposit level can be seen in the transparent section of the drain tube.



(1) Crankcase breather tube plug





ENGINE OIL

Refer to the Safety Precautions on page 67 .

Oil Recommendation

API classification	SG or higher except oils labeled as energy conserving on the circular API service label
Viscosity	SAE 10W-30
JASO T 903 standard	MB

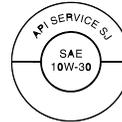
Suggested Oil
HONDA "4-STROKE GASOLINE ENGINE OIL" or equivalent.

Your scooter does not need oil additives. Use the recommended oil.

Do not use API SH or higher oils displaying a circular API "energy conserving" service label on the container. They may affect lubrication and clutch performance.



NOT RECOMMENDED



OK

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



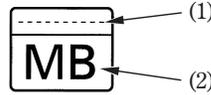
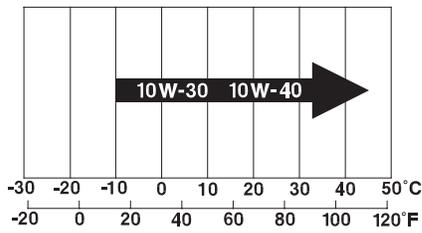


Viscosity:

Viscosity grade of engine oil should be based on average atmospheric temperature in your riding area. The following provides a guide to the selection of the proper grade or viscosity of oil to be used at various atmospheric temperatures.

JASO T 903 standard

The JASO T 903 standard is an index for engine oils for 4-stroke motorcycle engines. There are two classes: MA and MB. Oil conforming to the standard is labeled on the oil container. For example, the following label shows the MB classification.



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





Engine Oil/Oil Strainer Screen

Engine oil quality is the chief factor affecting engine service life. Change the engine oil as specified in the maintenance schedule (page 69).

When running in very dusty conditions, oil changes should be performed more frequently than specified in the maintenance schedule.

Please dispose of used engine oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash or pour it on the ground or down a drain.

Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

Changing the oil requires a torque wrench. If you do not have it and the necessary skill, we recommend that you have your Honda dealer perform this service.

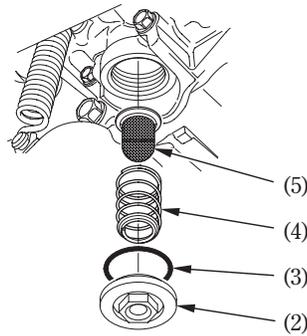
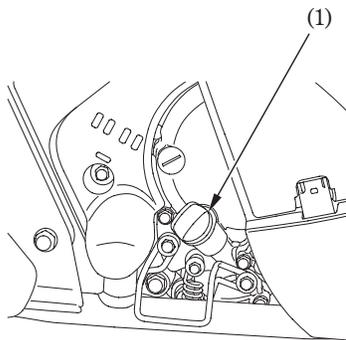
If a torque wrench is not used for this installation, see your Honda dealer as soon as possible to verify proper assembly.

Change the engine oil with the engine at normal operating temperature and the scooter on its center stand to assure complete and rapid draining.





1. Place a drain pan under the crankcase.
2. To drain the oil, remove the oil filler cap/dipstick (1), oil drain plug (2), O-ring (3), spring (4) and oil strainer screen (5).
3. Clean the oil strainer screen.
4. Check that the oil strainer screen, sealing rubber and drain plug O-ring are in good condition.



(1) Oil filler cap/dipstick

(2) Oil drain plug
(3) O-ring

(4) Spring
(5) Oil strainer screen





09/08/05 17:31:27 32KTGC00_092



5. Install the oil strainer screen, spring and drain plug.
Oil drain plug torque:
20 N·m (2.0 kgf·m , 14 lbf·ft)
6. Fill the crankcase with the recommended grade oil; approximately:
0.9 ℓ (1.0 US qt , 0.8 Imp qt)
7. Install the oil filler cap/dipstick.
8. Start the engine and let it idle for 3–5 minutes.
9. 2–3 minutes after stopping the engine, check that the oil level is at the upper level mark on the oil filler cap/dipstick with the scooter upright on firm, level ground. Make sure there are no oil leaks.





SPARK PLUG

Refer to the Safety Precautions on page 67 .

Recommended plugs:

Standard:

CR8EH-9 (NGK) or
U24FER9 (DENSO)

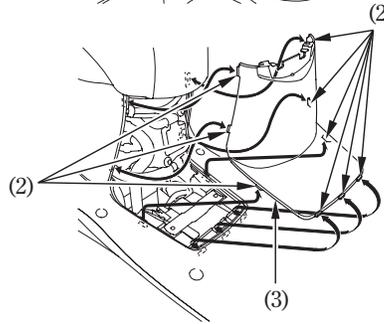
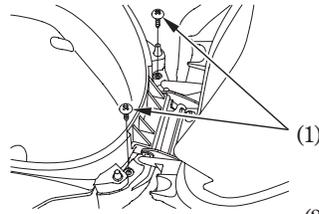
For extended high speed riding:

CR9EH-9 (NGK) or
U27FER9 (DENSO)

NOTICE

Never use a spark plug with an improper heat range. Severe engine damage could result.

1. Open the seat (page 42).
2. Remove the screws (1).
3. Release the tabs (2), then remove the maintenance lid (3).



(1) Screws
(2) Tabs

(3) Maintenance lid



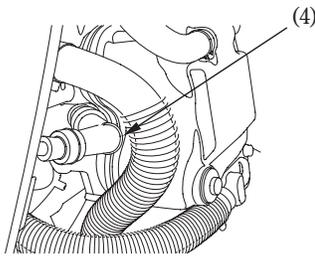


4. Disconnect the spark plug cap (4) from the spark plug.
5. Clean any dirt from around the spark plug base.
Remove the spark plug using a spark plug wrench furnished in the tool kit.
6. Discard the spark plug.

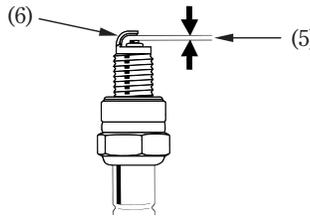
7. Inspect the electrodes and center porcelain for deposits, erosion or carbon fouling. If the erosion or deposit is heavy, replace the plug. Clean a carbon or wet-fouled plug with a plug cleaner, otherwise use a wire brush.
8. Check the spark plug gap (5) using a wire-type feeler gauge. If adjustment is necessary, bend the side electrode (6) carefully.

The gap should be:

0.80–0.90 mm (0.031–0.035 in)



(4) Spark plug cap



(5) Spark plug gap

(6) Side electrode





9. With the plug washer attached, thread the spark plug in by hand to prevent cross-threading.
10. Tighten the spark plug:
 - If the old plug is good:
 - 1/8 turn after it seats.
 - If installing a new plug, tighten it twice to prevent loosening:
 - a) First, tighten the plug:
 - NGK: 1/2 turn after it seats.
 - DENSO: 1 turn after it seats.
 - b) Then loosen the plug.
 - c) Next, tighten the plug again:
 - 1/8 turn after it seats.

NOTICE

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

11. Reinstall the spark plug cap and maintenance lid. Take care to avoid pinching any cables or wires.





COOLANT

Refer to the Safety Precautions on page 67 .

Coolant Replacement

Coolant should be replaced by a Honda dealer, unless the owner has proper tools and service data and is mechanically qualified. Refer to an official Honda Shop Manual.

Always add coolant to the reserve tank. Do not attempt to add coolant by removing the radiator cap.



WARNING

Removing the radiator cap while the engine is hot can cause the coolant to spray out, seriously scalding you.

Always let the engine and radiator cool down before removing the radiator cap.





THROTTLE OPERATION

Refer to the Safety Precautions on page 67 .

1. Check for smooth rotation of the throttle grip from the fully open to the fully closed position at both full steering positions.

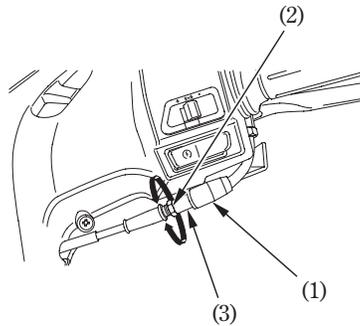
2. Measure the throttle grip freeplay at the throttle grip flange.

The standard freeplay should be approximately:

2 – 10 mm (0.08 – 0.39 in)

To adjust the freeplay, slide the throttle cable boot (1), then loosen the lock nut (2) and turn the adjuster (3).

After adjustment, tighten the lock nut and return the throttle cable boot securely.



(1) Throttle cable boot
(2) Lock nut

(3) Adjuster





FRONT AND REAR SUSPENSION INSPECTION

Refer to the Safety Precautions on page 67 .

1. Check the front fork assembly by locking the front brake and pumping the fork up and down vigorously. Suspension action should be smooth and there must be no oil leakage.
2. Engine hanger bushing—this can be checked by pushing hard against the side of the rear wheel while the scooter is on the center stand and feeling for looseness of the engine hanger bushings.
3. Carefully inspect all front and rear suspension fasteners for tightness.





BRAKE PAD WEAR

Refer to the Safety Precautions on page 67 .

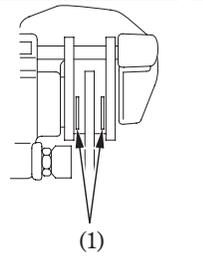
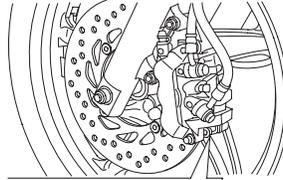
Brake pad wear depends upon the severity of usage, the type of riding, and road conditions. (Generally, the pads will wear faster on wet and dirty roads.)

Inspect the pads at each regular maintenance interval (page 70).

Front Brake

Check the wear indicator marks (1) on each pad.

If either pad is worn to the wear indicator mark, replace both pads as a set. See your Honda dealer for this service.



(1) Wear indicator marks

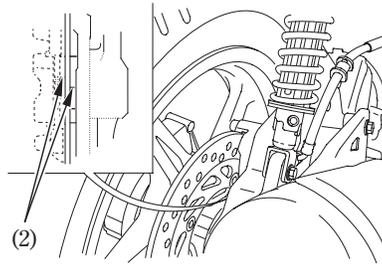




Rear Brake

Check the wear indicator grooves (2) in each pad.

If either pad is worn to the bottom of the grooves, replace both pads as a set. See your Honda dealer for this service.



(2) Wear indicator grooves





BATTERY

Refer to the Safety Precautions on page 67 .

It is not necessary to check the battery electrolyte level or add distilled water as the battery is a maintenance-free (sealed) type. If your battery seems weak and/or is leaking electrolyte (causing hard starting or other electrical troubles), contact your Honda dealer.

NOTICE

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

⚠ WARNING

The battery gives off explosive hydrogen gas during normal operation.

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

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



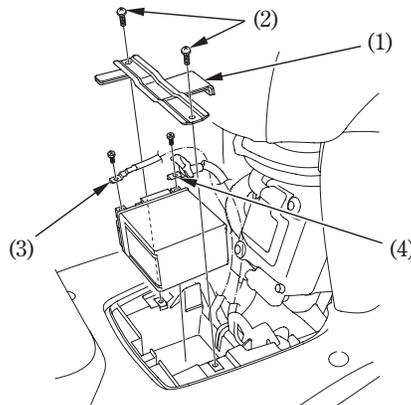


Removal:

1. Make sure the ignition switch is OFF.
2. Remove the maintenance lid (page 83).
3. Remove the battery holder (1) by removing the screws (2).
4. Disconnect the negative (-) terminal lead (3) from the battery first, then disconnect the positive (+) terminal lead (4).
5. Remove the battery.

Installation:

1. Reinstall in the reverse order of removal. Be sure to connect the positive (+) terminal first, then the negative (-) terminal.
2. Check all bolts and other fasteners are secure.



- (1) Battery holder
- (2) Screws
- (3) Negative (-) terminal lead
- (4) Positive (+) terminal lead





FUSE REPLACEMENT

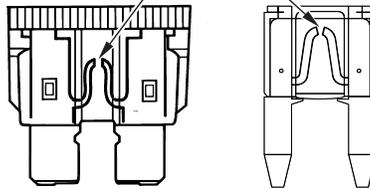
Refer to the Safety Precautions on page 67 .

When frequent fuse failure occurs, it usually indicates a short circuit or an overload in the electrical system. See your Honda dealer for repair.

NOTICE

Never use a fuse with a different rating from that specified. Serious damage to the electrical system or a fire may result, causing a dangerous loss of lights or engine power.

Blown fuse



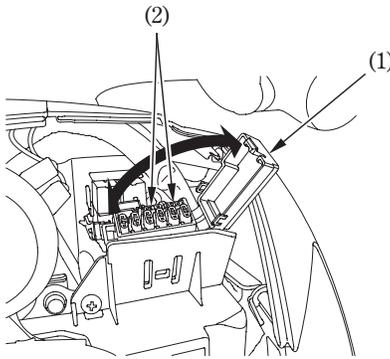


Fuse Box:

The fuse box is located behind the front cover.

The specified fuses are:
15A, 10A

1. Remove the front cover (page 47).
2. Open the fuse box cover (1).
3. Pull out the fuse with the fuse puller furnished in the tool kit (page 71). If the fuse is blown, install a new fuse. The spare fuses (2) are located in the fuse box.
4. Close the fuse box cover and install the front cover.



- (1) Fuse box cover
(2) Spare fuses





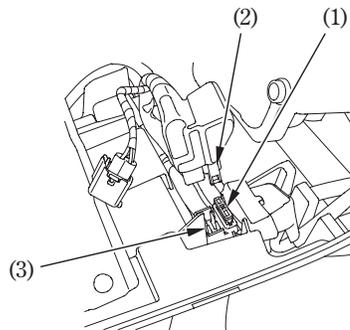
Main Fuse:

The main fuse (1) is located near the battery.

The specified fuse is:

30A

1. Remove the maintenance lid (page 83).
2. Disconnect the wire connector (2) of the starter magnetic switch (3).
3. Pull the fuse out. If the main fuse is blown, install a new main fuse. The spare main fuse is in the tool bag.
4. Reconnect the wire connector and install the maintenance lid.



(1) Main fuse
(2) Wire connector

(3) Starter magnetic switch





BULB REPLACEMENT

Refer to the Safety Precautions on page 67 .

The light bulb becomes very hot while the light is ON, and remains hot for a while after it is turned OFF. Be sure to let it cool down before servicing.

Do not put finger prints on the headlight bulb, as they may create hot spots on the bulb and cause it to break.

Wear clean gloves while replacing the bulb. If you touch the bulb with your bare hands, clean it with a cloth moistened with alcohol to prevent its early failure.

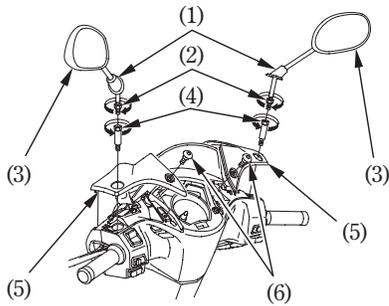
- Be sure to turn the ignition switch OFF when replacing the bulb.
- Do not use bulbs other than those specified.
- After installing a new bulb, check that the light operates properly.





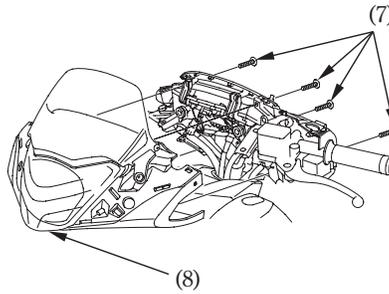
Headlight Bulb

1. Pull up the dust covers (1).
2. Loosen the lock nuts (2) until they will no longer turn.
3. Loosen the rearview mirrors (3) and remove them.
4. Loosen the mirror adapters (4) and remove them.



- | | |
|----------------------|----------------------------------|
| (1) Dust covers | (4) Mirror adapters |
| (2) Lock nuts | (5) Right and left handle covers |
| (3) Rearview mirrors | (6) Screws A |

5. Remove the right and left handle covers (5) by removing the screws A (6).
6. Remove the screws B (7).
7. Remove the front handle cover (8).

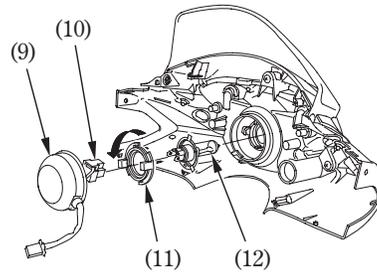


- | |
|------------------------|
| (7) Screws B |
| (8) Front handle cover |





8. Remove the dust cover (9).
9. Disconnect the connector (10).
10. Turn the bulb holder (11) counterclockwise and remove the bulb (12).
11. Install a new bulb in the reverse order of removal.



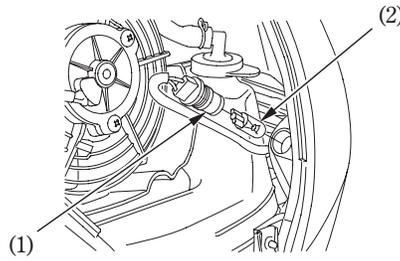
(9) Dust cover (11) Bulb holder
(10) Connector (12) Bulb





Position Light Bulb

1. Remove the front cover (page 47).
2. Remove the socket (1).
3. Pull out the position light bulb (2) without turning.
4. Install a new bulb in the reverse order of removal.



(1) Socket

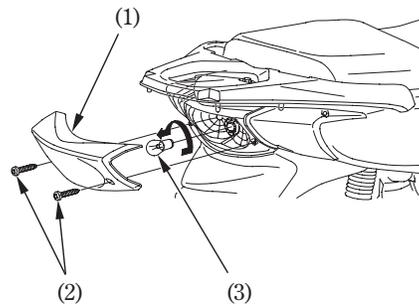
(2) Bulb





Brake/Tail Light Bulb

1. Remove the taillight lens (1) by removing the screws (2).
2. Slightly press the bulb (3) and turn it counterclockwise.
3. Install a new bulb in the reverse order of removal.



(1) Taillight lens
(2) Screws

(3) Bulb

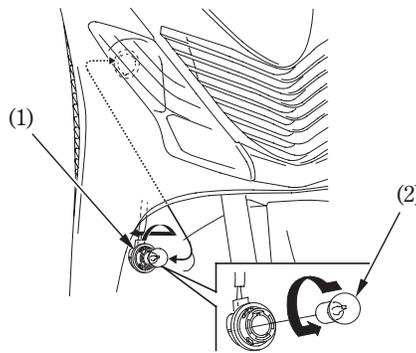




Front Turn Signal Bulb

The right and left turn signal bulbs replacement can be done in the same way.

1. Remove the socket (1) by turning it clockwise.
2. Slightly press the bulb (2) and turn it counterclockwise.
3. Install a new bulb in the reverse order of removal.
 - Use only the amber bulb.



(1) Socket

(2) Bulb

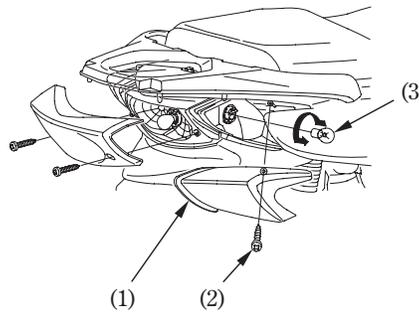




Rear Turn Signal Bulb

The right and left turn signal bulbs replacement can be done in the same way.

1. Remove the taillight lens (page100).
2. Remove the rear turn signal lens (1) by removing the screw (2).
3. Slightly press the bulb (3) and turn it counterclockwise.
4. Install a new bulb in the reverse order of removal.
 - Use only the amber bulb.



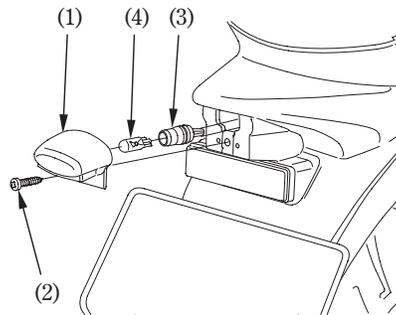
(1) Rear turn signal lens (3) Bulb
(2) Screw





License Light Bulb

1. Remove the license light cover (1) by removing the screw (2).
2. Pull out the socket (3).
3. Pull out the bulb (4) without turning.
4. Install a new bulb in the reverse order of removal.



(1) License light cover
(2) Screw

(3) Socket
(4) Bulb





CLEANING

Clean your scooter regularly to protect the surface finishes and inspect for damage, wear, and oil, coolant or brake fluid leakage.

Avoid cleaning products that are not specifically designed for scooter or automobile surfaces.

They may contain harsh detergents or chemical solvents that could damage the metal, paint, and plastic on your scooter.

If your scooter is still warm from recent operation, give the engine and exhaust system time to cool off.

We recommend avoiding the use of high pressure water spray (typical in coin-operated car washes).

NOTICE

High pressure water (or air) can damage certain parts of the scooter.

Washing the scooter

1. Rinse the scooter thoroughly with cool water to remove loose dirt.
2. Clean the scooter with a sponge or soft cloth using cool water.
Avoid directing water to muffler outlets and electrical parts.
3. Clean the plastic parts using a cloth or sponge dampened with a solution of mild detergent and water. Rub the soiled area gently rinsing it frequently with fresh water.

Take care to keep brake fluid or chemical solvents off the scooter.

They will damage the plastic and painted surfaces.

The inside of the headlight lens may be clouded immediately after washing the scooter. Moisture condensation inside the headlight lens will disappear gradually by lighting the headlight in high beam. Run the engine while keeping the headlight on.

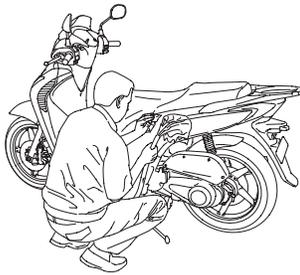




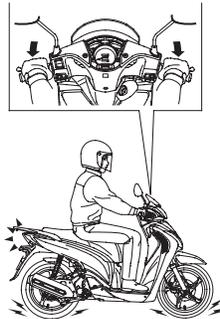
4. After cleaning, rinse the scooter thoroughly with plenty of clean water. Strong detergent residue can corrode alloy parts.
5. Dry the scooter, start the engine and let it run for several minutes.

6. Test the brakes before riding the scooter. Several applications may be necessary to restore normal braking performance.

Braking efficiency may be temporarily impaired immediately after washing the scooter. Anticipate longer stopping distance to avoid a possible accident.



TEST BRAKES





Finishing Touches

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



Removing Road Salt

Seawater can be found on the road near the seaside. The salt in seawater causes rust. Wash your scooter as follows after it has run through salty water.

1. Clean the scooter using cool water (page 104).

Do not use warm water.
This worsens the effect of the salt.

2. Dry the scooter and the surface of the metal is protected with the wax.





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

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

Clean the Mat Painted Surface
Using plenty of water, clean the mat painted surface with a soft cloth or sponge. Dry with a soft, clean cloth.

Use neutral detergent to clean mat painted surface.

Do not use waxes containing compounds.





STORAGE GUIDE

Extended storage, requires that you take certain steps to reduce the effects of deterioration from non-use of the scooter. In addition, necessary repairs should be made BEFORE storing the scooter; otherwise, these repairs may be forgotten by the time the scooter is removed from storage.

STORAGE

1. Change the engine oil.
2. Make sure the cooling system is filled with a HONDA PRE-MIX COOLANT.
3. Empty the fuel tank into an approved petrol container using a commercially available hand siphon or an equivalent method. Spray the inside of the tank with an aerosol rust-inhibiting oil. Reinstall the fuel fill cap on the tank.

WARNING

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

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





4. To prevent rusting in the cylinder, perform the following:
 - Remove the spark plug cap from the spark plug. Using tape or string, secure the cap to any convenient plastic body part so that it is positioned away from the spark plug.
 - Remove the spark plug from the engine and store it in a safe place. Do not connect the spark plug to the spark plug cap.
 - Pour a tablespoon (15–20 cm³) of clean engine oil into the cylinder and cover the spark plug hole with a piece of cloth.
 - Crank the engine several times to distribute the oil.
 - Reinstall the spark plug and spark plug cap.
5. Remove the battery. Store in an area protected from freezing temperatures and direct sunlight. Slow charge the battery once a month.
6. Wash and dry the scooter. Wax all painted surfaces. Coat chrome with rustinhibiting oil.
7. Inflate the tyres to their recommended pressures. Place the scooter on blocks to raise both tyres off the ground.
8. Cover the scooter (don't use plastic or other coated materials) and store in an unheated area, free of dampness with a minimum of daily temperature variation. Do not store the scooter in direct sunlight.





REMOVAL FROM STORAGE

1. Uncover and clean the scooter.
2. Change the engine oil if more than 4 months have passed since the start of storage.
3. Charge the battery as required. Install the battery.
4. Drain any excess aerosol rust-inhibiting oil from the fuel tank. Fill the fuel tank with fresh petrol.
5. Perform all Pre-ride Inspection checks (page 49).
Test ride the scooter at low speeds in a safe riding area away from traffic.





TAKING CARE OF THE UNEXPECTED

IF YOU CRASH

Personal safety is your first priority after a crash. 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. Call for emergency assistance if needed. Also follow applicable laws and regulations if another person or vehicle is involved in the crash.

If there is minor damage, or you are unsure about possible damage, ride slowly and cautiously. Sometimes, crash damage is hidden or not immediately apparent, so you should have your scooter thoroughly checked at a qualified service facility as soon as possible. Also, be sure to have your Honda dealer check the frame and suspension after any serious crash.

If you decide that you are capable of riding safely, first evaluate the condition of your scooter. If the engine is still running, turn it off and look it over carefully; inspect it for fluid leaks, check the tightness of critical nuts and bolts, and secure such parts as the handlebar, control levers, brakes, and wheels.





SPECIFICATIONS

DIMENSIONS

Overall length	2,025 mm (79.7 in)
Overall width	726 mm (28.6 in)
Overall height	1,230 mm (48.4 in)
Wheelbase	1,335 mm (52.6 in)

CAPACITIES

Engine oil	After draining	0.9 l (1.0 US qt , 0.8 Imp qt)
	After disassembly	1.0 l (1.1 US qt , 0.9 Imp qt)
Fuel tank		7.5 l (1.98 US gal , 1.65 Imp gal)
Transmission oil	After draining	0.19 l (0.20 US qt , 0.17 Imp qt)
	After disassembly	0.22 l (0.23 US qt , 0.19 Imp qt)
Cooling system capacity		0.95 l (1.00 US qt , 0.84 Imp qt)
Passenger capacity		Operator and one passenger
Maximum weight capacity		180 kg (397 lb)



ENGINE

Bore and stroke	52.4 × 57.8 mm (2.06 × 2.28 in)... SH125CRF 58.0 × 57.8 mm (2.28 × 2.28 in)... SH150CRF
Compression ratio	11.0 : 1
Displacement	124.6 cm ³ (7.60 cu-in)... SH125CRF 152.7 cm ³ (9.31 cu-in)... SH150CRF
Spark plug	CR8EH-9 (NGK) or U24FER9 (DENSO)
Standard	
For extended high speed riding	CR9EH-9 (NGK) or U27FER9 (DENSO)
Spark plug gap	0.80 – 0.90 mm (0.031 – 0.035 in)
Idle speed	1,500 ± 100 min ⁻¹ (rpm)



09/08/05 17:35:32 32KTGC00_124



CHASSIS AND SUSPENSION

Caster	27°00'
Trail	85.0 mm (3.35 in)
Tyre size, front	100/80 – 16M/C 50P DUNLOP D451
Tyre size, rear	IRC SS – 530F 120/80 – 16M/C 60P DUNLOP D451
Tyre type	IRC SS – 530R bias – ply, tubeless



POWER TRANSMISSION

Primary reduction	V – Belt
Final reduction	11.423 ... SH125CRF 10.544 ... SH150CRF





09/08/05 17:35:43 32KTGC00_125



ELECTRICAL

Battery
Generator

12V—6Ah
0.30kW / 5,000 min⁻¹ (rpm)

LIGHTS

Headlight
Brake/Tail light
Turn signal light Front
 Rear

12V—60/55W
12V—21/5W
12V—21W × 2
12V—21W × 2
12V—5W
12V—1.7W × 3
12V—3W × 2
12V—1.7W
12V—5W

Position light
Speedometer lights
Turn signal indicator
High beam indicator
License light
PGM-FI malfunction indicator
lamp (MIL)
Oil change indicator

LED
LED

FUSE

Main fuse
Other fuses

30A
15A, 10A





CATALYTIC CONVERTER

This scooter is equipped with a catalytic converter.

The catalytic converter contains precious metals that serve as catalysts, promoting chemical reactions to convert the exhaust gasses without affecting the metals.

The catalytic converter acts on HC, CO, and NOx. A replacement unit must be an original Honda part or its equivalent.

The catalytic converter must operate at a high temperature for the chemical reactions to take place. It can set on fire any combustible materials that come near it. Park your scooter away from high grasses, dry leaves, or other flammables.

A defective catalytic converter contributes to air pollution, and can impair your engine's performance. Follow these guidelines to protect your scooter's catalytic converter.

- Always use unleaded petrol. Even a small amount of leaded petrol can contaminate the catalyst metals, making the catalytic converter ineffective.
- Keep the engine in good running condition.
A poorly running engine can cause the catalytic converter to overheat causing damage to the converter or the scooter.
- If your engine is misfiring, backfiring, stalling, or otherwise not running properly, stop riding and turn off the engine. Have your scooter serviced as soon as possible.

