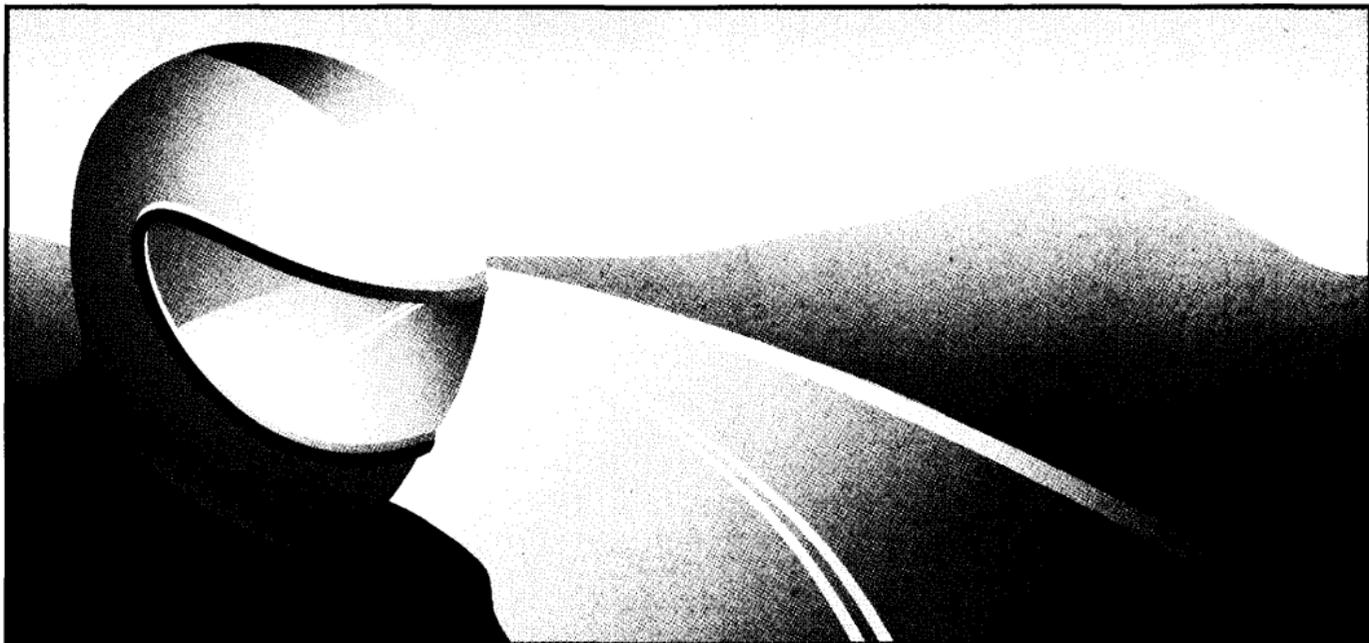




**OWNER'S MANUAL
USO E MANUTENZIONE
MANUAL DEL PROPIETARIO**



**NSS250S
NSS250A**

Honda NSS250S/NSS250A

OWNER'S MANUAL

USO E MANUTENZIONE

MANUAL DEL PROPIETARIO

IMPORTANT INFORMATION

- **OPERATOR AND PASSENGER**

This scooter is designed to carry the operator and one passenger. Never exceed the maximum weight capacity as shown on the accessories and loading label.

- **ON-ROAD USE**

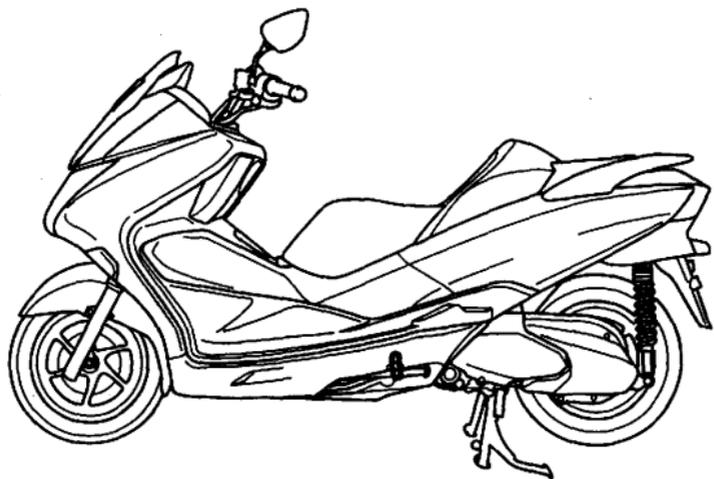
This scooter is designed to be used only on the road.

- **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.

Honda NSS250S/NSS250A OWNER'S MANUAL



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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 !

- The following codes in this manual indicate each country.
- The illustrations herein are based on the NSS250A type.

NSS250S

ED	(Europe)			
	Austria	Greece	Macedonia	Spain
	Belgium	Holland	Norway	Sweden
	Bulgaria	Hungary	Poland	Switzerland
	Croatia	Iceland	Portugal	Ukraine
	Czech	Israel	Romania	
	Denmark	Italy	Russia	
	Finland	Latvia	Slovakia	
	Germany	Luxembourg	Slovenia	

NSS250A

ED	(Europe)				F	France
	Austria	Greece	Macedonia	Spain		
	Belgium	Holland	Norway	Sweden		
	Bulgaria	Hungary	Poland	Switzerland		
	Croatia	Iceland	Portugal	Ukraine		
	Czech	Israel	Romania			
	Denmark	Italy	Russia			
	Finland	Latvia	Slovakia			
	Germany	Luxembourg	Slovenia			

- The specifications may vary with each locale.

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.

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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 accidents. Never ride beyond your personal abilities or faster than conditions warrant. Remember that alcohol, drugs, fatigue and inattention can significantly reduce your ability to make good judgements and ride safely.

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, long pants, and a long-sleeved shirt or jacket whenever you ride. Although complete protection is not possible, wearing proper gear can reduce the chance of injury when you ride.

Following are suggestions to help you choose 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:

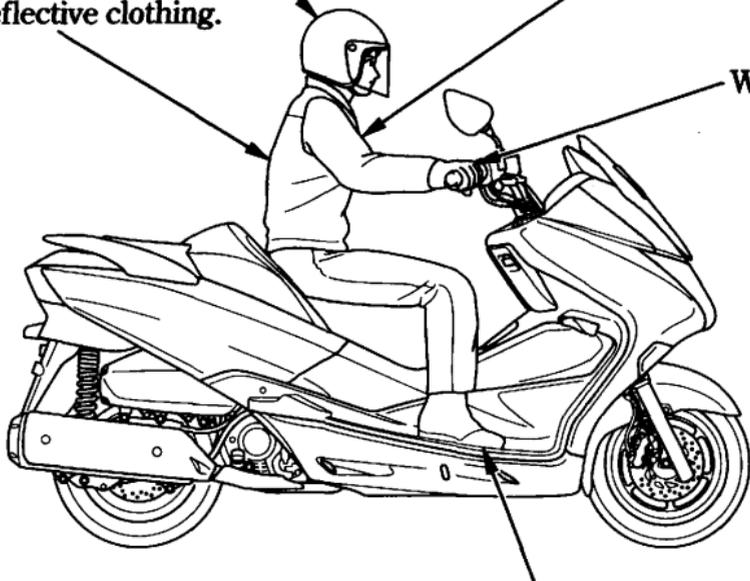
- Sturdy boots with non-slip soles to help protect your feet and ankles.
- Leather gloves to keep your hands warm and help prevent blisters, cuts, burns and bruises.
- A motorcycle riding suit or jacket for comfort as well as protection. Bright-colored and reflective clothing can help make you more noticeable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

ALWAYS wear a helmet.
You should also wear a face shield or goggles.

Wear bright or reflective clothing.

Clothes should be close-fitting.

Wear gloves.



Shoes should be close-fitting, have low heels and offer ankle protection.

LOAD LIMITS AND GUIDELINES

Your scooter has been designed to carry you, one passenger and a limited amount of cargo. When you add cargo or 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 limits and guidelines.

However, exceeding the weight limit 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 load limits and other loading guidelines in this manual.

Load Limits

Following are the load limits for your scooter:

Maximum weight capacity:

180 kg (397 lbs)

Includes the weight of the rider, passenger, all cargo and all accessories

Maximum cargo weight:

19 kg (42 lbs)

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

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
in right and left console
boxes

10 kg (22 lbs)

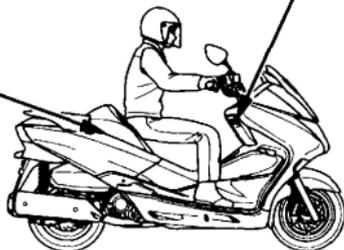
1.5 kg (3.3 lbs)

Right and left console boxes:
weight limit:

1.5 kg (3.3 lbs)

Center compartment:
weight limit:

10 kg (22 lbs)



Loading Guidelines

Your scooter is primarily intended for transporting you and 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 48).
- If you change your normal load, you may need to adjust the rear suspension (page 35).
- To prevent loose items from creating a hazard, make sure the center compartment, right and left console boxes are 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 190). 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.

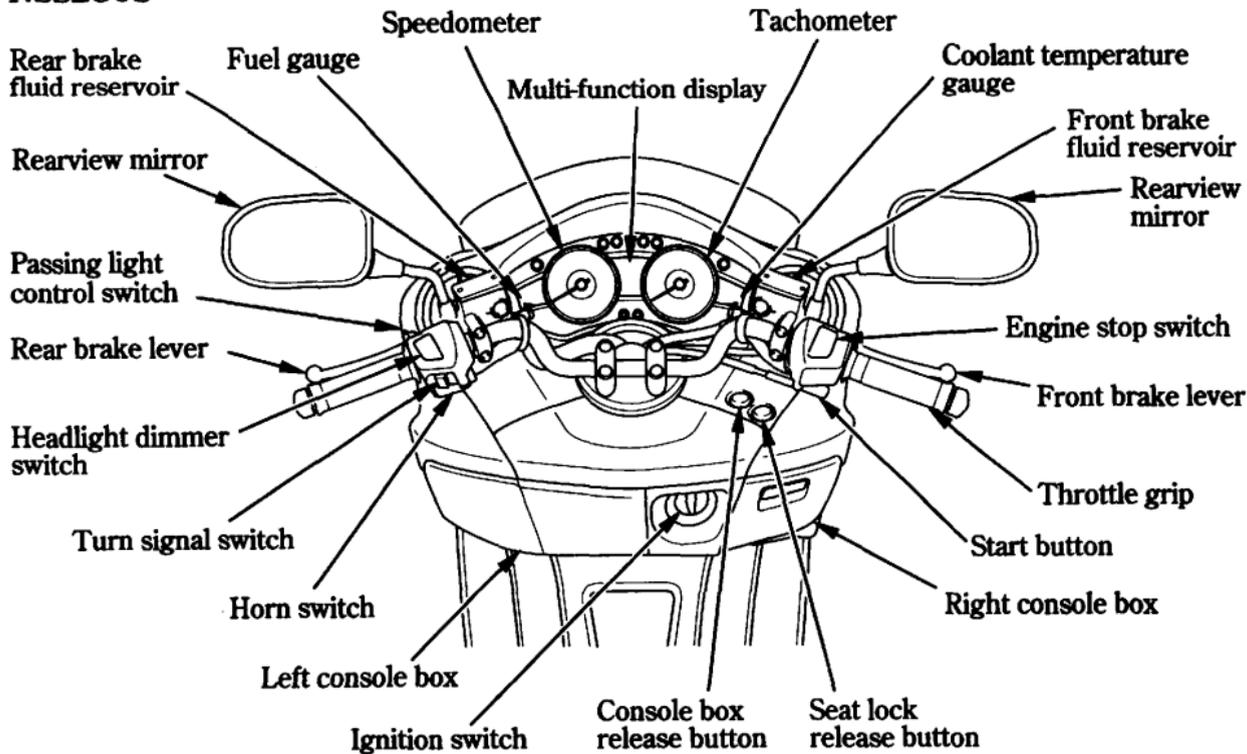
Modifications

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.

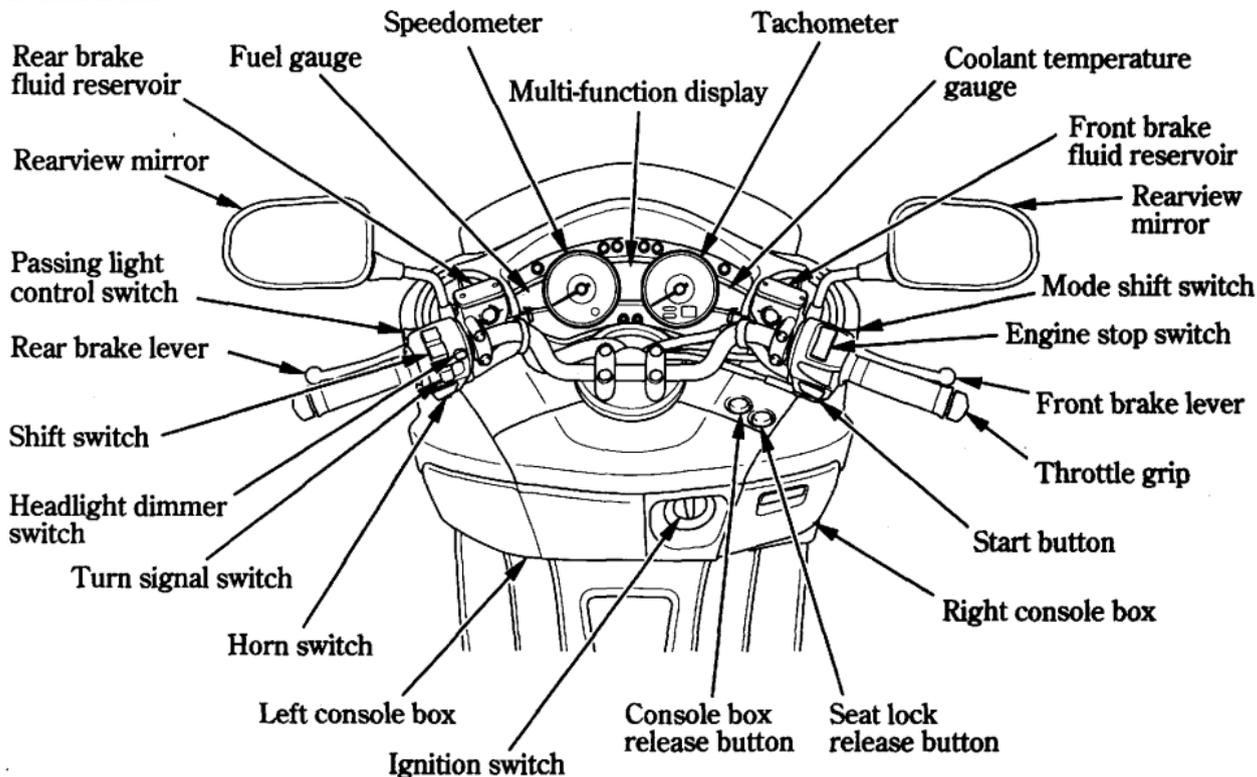
Removing or modifying your lights, mufflers, emission control system or other equipment can also make your scooter illegal.

PARTS LOCATION

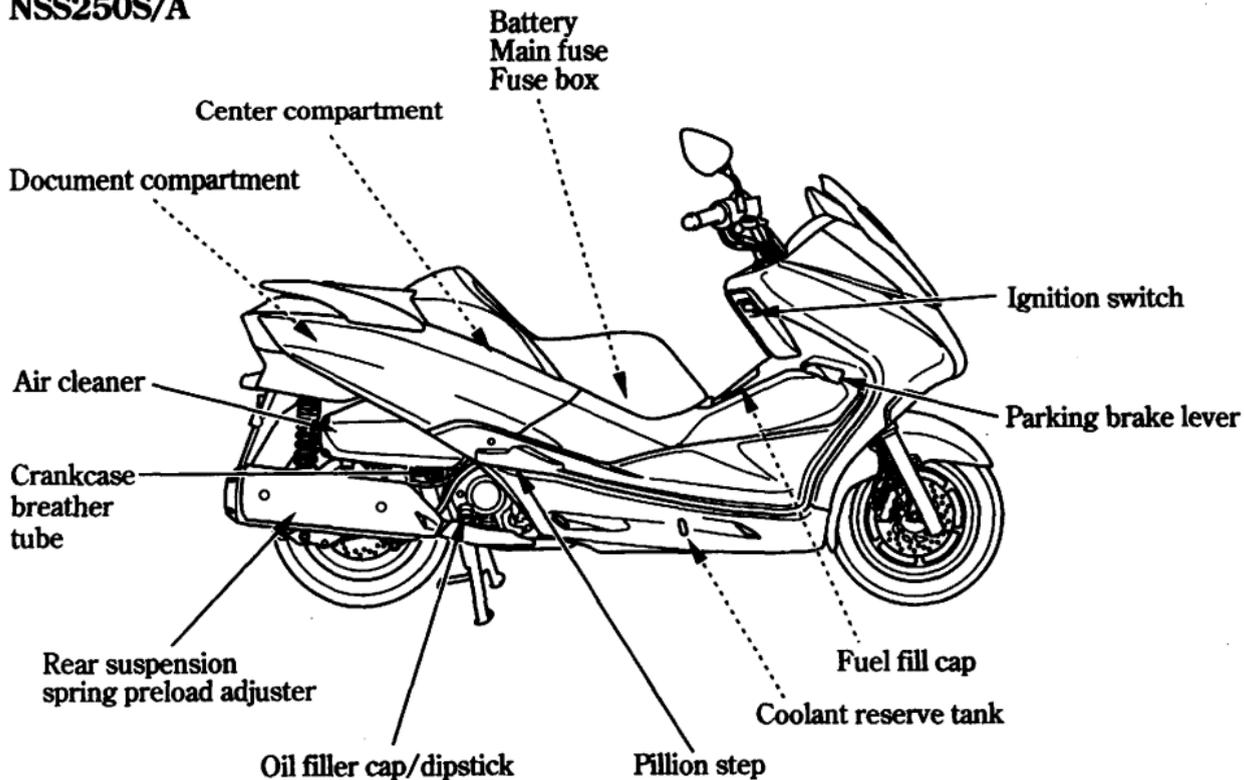
NSS250S



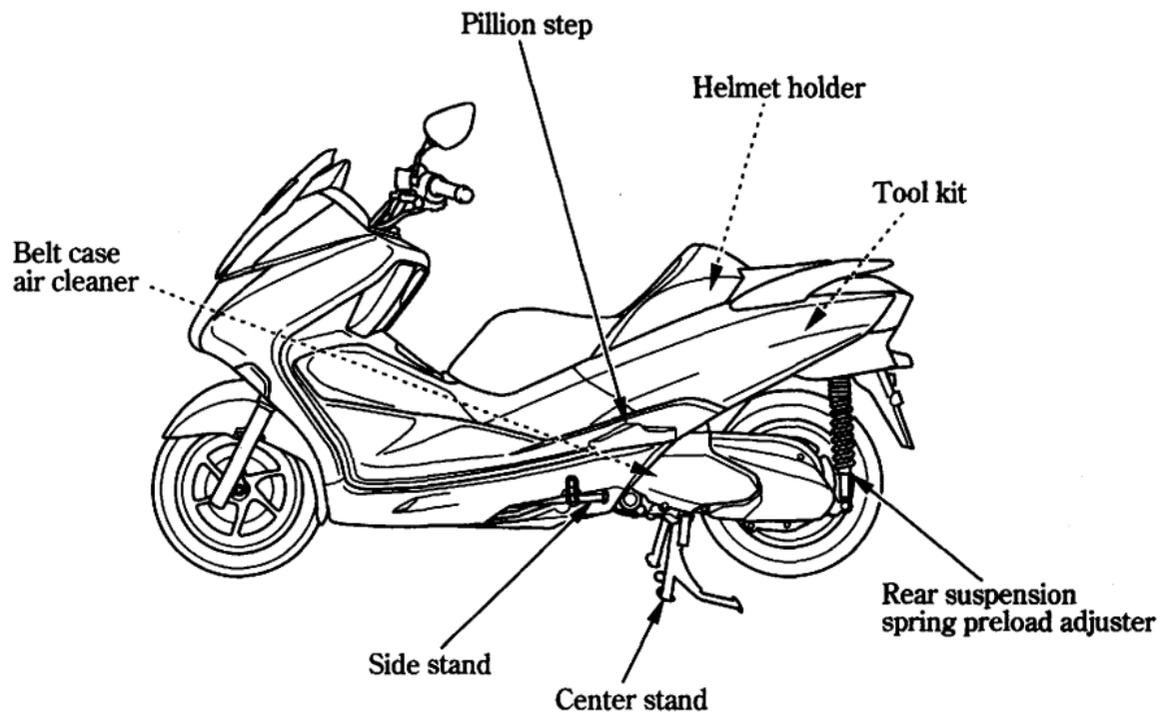
NSS250A



NSS250S/A



NSS250S/A

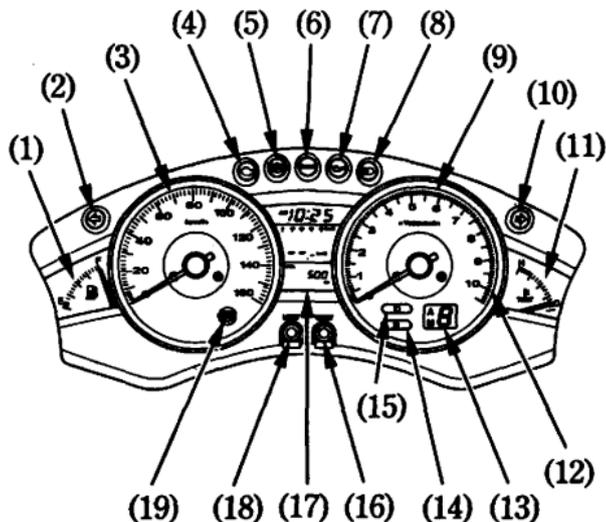


INSTRUMENTS AND INDICATORS

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

- (1) Fuel gauge
- (2) Left turn signal indicator
- (3) Speedometer
- (4) PGM-FI malfunction indicator lamp (MIL)
- (5) Parking brake indicator
- (6) Honda smart card key indicator
- (7) Low oil pressure indicator
- (8) High beam indicator
- (9) Tachometer
- (10) Right turn signal indicator
- (11) Coolant temperature gauge
- (12) Tachometer red zone
- (13) Shift information display (NSS250A)
- (14) S mode indicator (NSS250A)
- (15) D mode indicator (NSS250A)
- (16) RESET button
- (17) Multi-function display

- (18) Mode button
- (19) Anti-lock Brake System (ABS) indicator (NSS250A)



(Ref.No.) Description	Function
(1) Fuel gauge	Shows approximate fuel supply available (page 34). The fuel gauge needle will swing to the maximum scale on the dial once when the ignition switch is turned ON.
(2) Left turn signal indicator (green)	Flashes when the left turn signal operates.
(3) Speedometer	Shows riding speed. The speedometer needle will swing to the maximum scale on the dial once when the ignition switch is turned ON.
(4) PGM-FI malfunction indicator lamp (MIL) (amber)	Flashes 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 and engine stop switch is at  (RUN). If it comes on at any other time, reduce speed and take the scooter to your Honda dealer as soon as possible.

(Ref.No.) Description	Function
(5) Parking brake indicator (red)	It lights as a reminder that you have not released the parking brake.
(6) Honda smart card key indicator (amber)	<p>Push the ignition switch. When the ID is authenticated, the Honda smart card key indicator lights. When you turn the ignition switch ON, the Honda smart card key indicator will go off in 2 seconds when the engine stop switch is at ○ (RUN) (page 61).</p> <p>When the battery is low, the Honda smart card key indicator flashes 5 times when you turn the ignition switch ON (page 62).</p> <p>Flashes when the Honda smart card key has operating problems (page 62).</p>
(7) Low oil pressure indicator (red)	<p>Lights when the engine oil pressure is below normal operating range. Should light when ignition switch is ON and engine is not running. Should go out when the engine starts, except for occasional flickering at or near idling speed when engine is warm.</p> <p>NOTICE</p> <p>Running the engine with insufficient oil pressure may cause serious engine damage.</p>

(Ref.No.) Description	Function
(8) High beam indicator (blue)	Lights when the headlight is on high beam.
(9) Tachometer	Shows engine revolutions per minute. The tachometer needle will swing to the maximum scale on the dial once when the ignition switch is turned ON.
(10) Right turn signal indicator (green)	Flashes when the right turn signal operates.
(11) Coolant temperature gauge	Shows coolant temperature (page 33). The coolant temperature gauge needle will swing to the maximum scale on the dial once when the ignition switch is turned ON.

(Ref.No.) Description	Function						
(12) Tachometer red zone	<p>Never allow the tachometer needle to enter the red zone, even after the engine has been broken in.</p> <p>NOTICE</p> <p>Running the engine beyond recommended maximum engine speed (the beginning of the tachometer red zone) can damage the engine.</p>						
(13) Shift information display (NSS250A)	<p>The display includes the following functions; This display shows the initial display (page 22).</p> <table border="1" data-bbox="188 532 1338 842"> <tbody> <tr> <td data-bbox="188 532 561 636">"M" Icon mark</td> <td data-bbox="561 532 1338 636">Displays when the 7-speed manual mode is selected (page 32).</td> </tr> <tr> <td data-bbox="188 636 561 739">"A" Icon mark</td> <td data-bbox="561 636 1338 739">Displays when the 7-speed automatic mode is selected (page 32).</td> </tr> <tr> <td data-bbox="188 739 561 842">Shift indicator</td> <td data-bbox="561 739 1338 842">Shows the gear position when the 7-speed manual or automatic mode is selected (page 31).</td> </tr> </tbody> </table>	"M" Icon mark	Displays when the 7-speed manual mode is selected (page 32).	"A" Icon mark	Displays when the 7-speed automatic mode is selected (page 32).	Shift indicator	Shows the gear position when the 7-speed manual or automatic mode is selected (page 31).
"M" Icon mark	Displays when the 7-speed manual mode is selected (page 32).						
"A" Icon mark	Displays when the 7-speed automatic mode is selected (page 32).						
Shift indicator	Shows the gear position when the 7-speed manual or automatic mode is selected (page 31).						

(Ref.No.) Description	Function
(14) S mode indicator (amber) (NSS250A)	Lights when the S mode is selected in the automatic shift mode (page 88).
(15) D mode indicator (green) (NSS250A)	Lights when the D mode is selected in the automatic shift mode (page 88).
(16) RESET button	This button is used to reset the tripmeter to zero (0) (page 26). This button is also used to reset the oil change indicator (page 30) and adjust the time (page 27).

(Ref.No.) Description	Function
(17) Multi-function display	The display includes the following functions; This display shows the initial display (page 22).
Current fuel consumption gauge	Shows current fuel consumption (page 24).
Average fuel consumption meter	Shows average fuel consumption (page 25).
Odometer	Shows accumulated mileage (page 26).
Tripmeter	Shows mileage per trip (page 26).
Digital clock	Shows hour and minute (page 27).
Oil change indicator	Lights when specified maintenance interval for engine oil change is reached (page 30).

(Ref.No.) Description	Function
(18) Mode button	The button is used to select the odometer or the tripmeter A or B (page 26), to adjust the time (page 27).
(19) Anti-lock Brake System (ABS) indicator (red) (NSS250A)	This light normally comes on when the ignition is turned ON, and goes off after you ride the scooter at speed above 10 km/h (6 mph). If there is a problem with the Anti-lock Brake System, this light comes on and remains on (page 38).

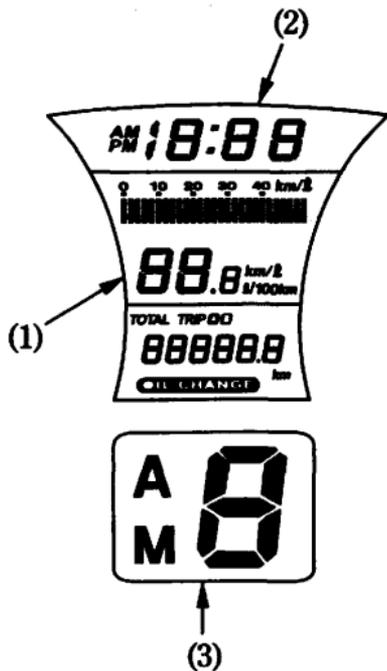
Initial Display

When the ignition switch is turned ON, the multi-function display (1) will temporarily show all the modes and digital segments so that you can make sure the liquid crystal display is functioning properly.

Digital clock (2) will reset if the battery is disconnected.

(NSS250A)

Shift information display (3) will also temporarily show all the modes and digital segments so that you can make sure the liquid crystal display is functioning properly.

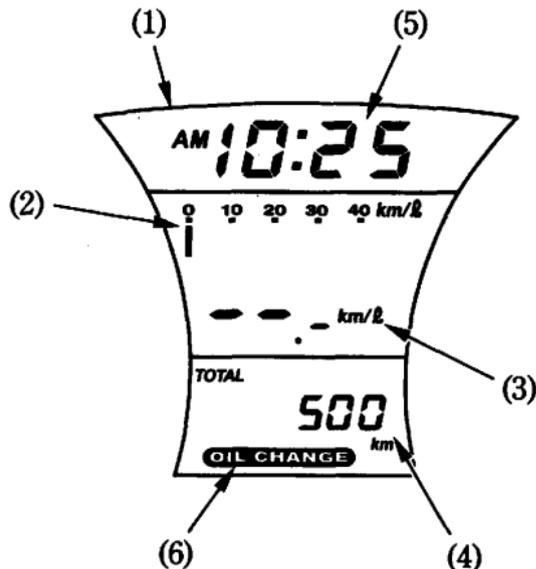


- (1) Multi-function display
- (2) Digital clock
- (3) Shift information display

Multi-function Display

Multi-function display (1) includes the following functions:

- Current fuel consumption gauge
- Average fuel consumption meter
- Odometer/Tripmeter
- Digital clock
- Oil change indicator

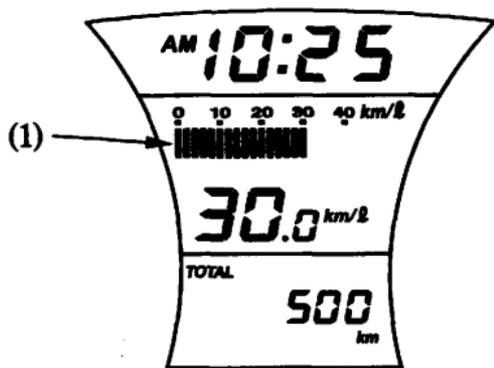


- (1) Multi-function display
- (2) Current fuel consumption gauge
- (3) Average fuel consumption meter
- (4) Odometer/Tripmeter
- (5) Digital clock
- (6) Oil change indicator

Current Fuel Consumption Gauge

Shows current fuel consumption in gauge of km/ℓ. When the speed is 0 km/h, shows "0" in gauge of km/ℓ.

- Displayed current fuel consumption gauge (1) is an instant value, so it is different from a value that is measured after filling up the tank. It may give you an indication of your eco drive.



(1) Current fuel consumption gauge

Average Fuel Consumption Meter

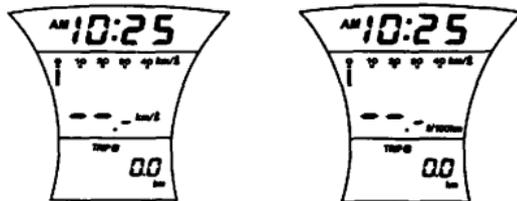
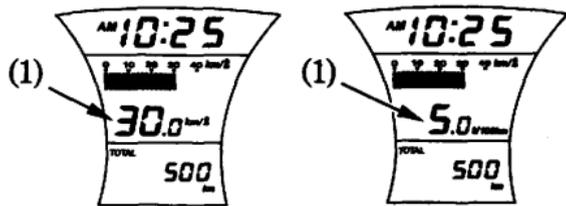
The meter shows average fuel consumption in km/ℓ or ℓ/100 km based on tripmeter A.

To select km/ℓ or ℓ/100 km, press and hold the mode button for more than 2 seconds with tripmeter in the display.

The meter shows average fuel consumption since you last reset tripmeter A.

When you reset tripmeter A, average fuel consumption is reset at the same time.

After you reset tripmeter A, average fuel consumption meter (1) shows “-.-”.



(1) Average fuel consumption meter

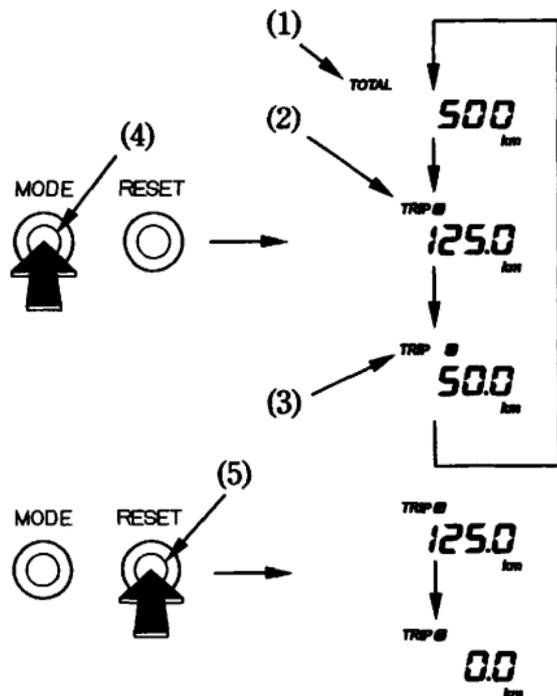
Odometer/Tripmeter

The odometer (1) shows accumulated mileage.

The tripmeter shows mileage per trip. There are two tripmeters, tripmeter A (2) and tripmeter B (3).

Push the MODE button (4) to select the odometer, tripmeter A and tripmeter B.

To reset the tripmeter, push and hold the RESET button (5) when the display is in the tripmeter A or tripmeter B.



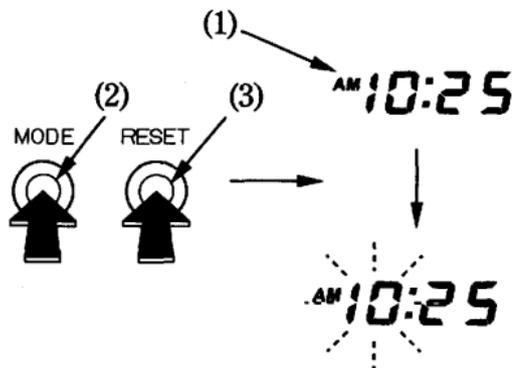
- (1) Odometer
- (2) Tripmeter A
- (3) Tripmeter B

- (4) MODE button
- (5) RESET button

Digital Clock

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

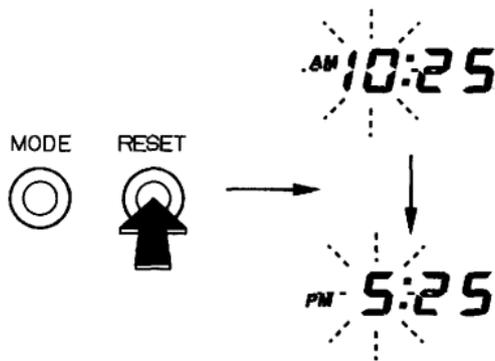
1. Turn the ignition switch ON.
2. Press and hold both the MODE button (2) and RESET button (3) for more than 2 seconds. The clock will be set in the adjust mode with the hour display flashing.



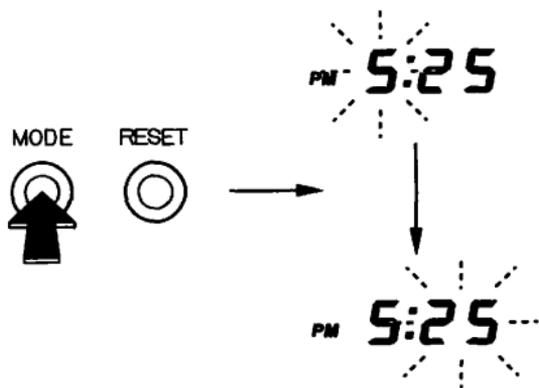
- (1) Digital clock
- (2) MODE button
- (3) RESET button

3. To set the hour, press the RESET button until the desired hour and AM/PM are displayed.

- The time is advanced by one hour, each time the button is pushed.
- Quick setting — press and hold the RESET button until the desired hour appears.

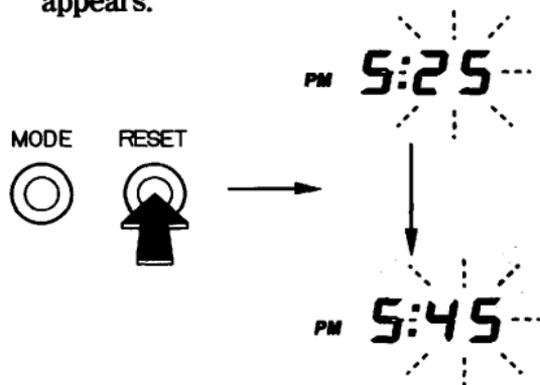


4. Press the MODE button. The minute display will start flashing.



5. To set the minute, press the RESET button until the desired minute. The minute display will return to "00" when "60" is reached without affecting the hour display.

- The time is advanced by one minute, each time the button is pushed.
- Quick setting – press and hold the RESET button until the desired minute appears.



6. To end the adjustment, press the MODE button or turn the ignition switch OFF.

The display will stop flashing automatically and the adjustment will be cancelled if the button is not pressed for about 2 minutes.

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.

The oil change indicator lights when the odometer shows the first interval (1,000 km) or every 6,000 km after resetting the oil change indicator.

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.

Reset the indicator after each oil change. Press and hold the RESET button (2), then turn ON the ignition switch. Keep the RESET button pressed for 3 seconds. The oil change indicator will go off.

The oil change indicator should also light for a few seconds and then go off when the ignition switch is turned ON.



(1)

MODE



RESET



(2)

(1) Oil change indicator

(2) Reset button

Shift Information Display (NSS250A)

The shift information display (1) shows the gear position when the 7-speed manual or automatic mode is selected (page83). The shift indicator flashes when the shifting is restricted (page90).

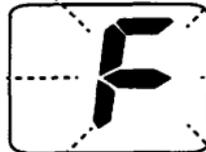
If the Honda S matic is in trouble, "F" lights or flashes on the display (page91).

When the automatic shift mode is selected, the current fuel consumption meter is displayed.



(1)

(1) Shift information display



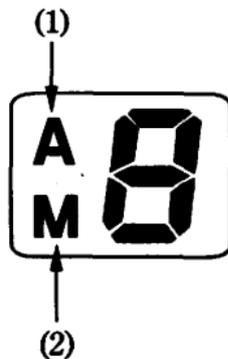
(When the Honda S matic is in trouble)

“A” Icon Mark (NSS250A)

The “A” icon mark (1) appears when the 7-speed automatic mode is selected (page 83).

“M” Icon Mark (NSS250A)

The “M” icon mark (2) appears when the 7-speed manual mode is selected (page 83).



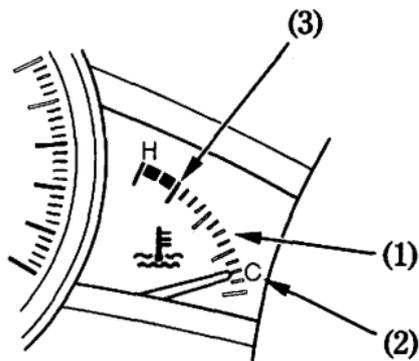
(1) “A” icon mark

(2) “M” icon mark

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 under the H (Hot) mark range (3). If the needle reaches the H (Hot) mark range, stop the engine and check the reserve tank coolant level. Read pages 41 – 42 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) H (Hot) mark range

Fuel Gauge

The fuel gauge (1) shows the approximate fuel supply available in a graduated display.

When the gauge needle 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 needle enters the red band is approximately:

2.1 ℓ (0.55 US gal , 0.46 Imp gal)



(1) Fuel gauge

(2) Red band

MAJOR COMPONENTS

(Information you need to operate this scooter)

SUSPENSION

Each shock absorber (1) has 5 adjustment positions for different load or riding conditions.

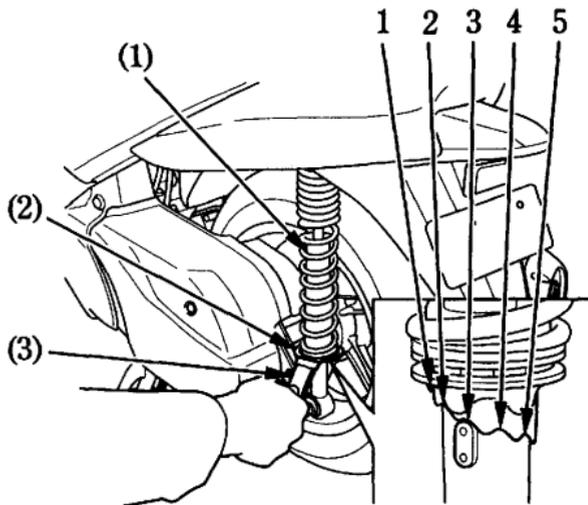
Use a pin spanner (2) and an extension bar (3) to adjust the rear shocks.

Always adjust the shock absorber position in sequence (1-2-3-4-5 or 5-4-3-2-1).

Attempting to adjust directly from 1 to 5 or 5 to 1 may damage the shock absorber.

Position 1 and 2 are for light loads and smooth road conditions. Positions 4 to 5 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: 3



- (1) Shock absorber
- (2) Pin spanner
- (3) Extension bar

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.

Anti-lock Brake System (ABS) (NSS250A)

This model is also equipped with an Anti-lock Brake System (ABS) designed to help prevent wheel lock up during hard braking on uneven or other poor surfaces while running straight. Although the wheel may not lock up—if you are braking too hard in a turn the scooter can still lose traction, causing a loss of control.

In some situations, a scooter with ABS may require a longer stopping distance to stop on loose or uneven surfaces than an equivalent scooter without ABS.

ABS cannot make up for road conditions, bad judgment, or improper operation of the brakes. It is still your responsibility to ride at reasonable speeds for weather, road surface, and traffic conditions, and to leave a margin of safety.

ABS is self-checking and always on.

- ABS may be activated by riding over a sharp drop or rise in the road level. It is important to follow the tyre recommendations (page 52). The ABS computer works by comparing wheel speed. Non-recommended tyres can affect wheel speed and may confuse the ABS computer.
- ABS does not function at low speeds (approximately 10 km/h (6 mph) or below).
- ABS does not function if the battery is discharged.

ABS Indicator Light (NSS250A)

Normally, this light comes on when the ignition switch is turned ON, and goes off after you ride the scooter at speed above 10 km/h (6 mph). If there is an ABS problem, the indicator light comes on and remains on. The ABS system does not operate when the ABS indicator light is on.

If the ABS indicator light comes on while riding, stop the scooter in a safe place and turn off the engine.

Turn the ignition switch ON again. The light should come on, and go off after you ride the scooter at speeds above 30 km/h (19 mph). If it does not go off, ABS is not functioning, but the brakes still work the Combined Brake System and provide normal stopping ability. However, you should have the system checked by your Honda dealer as soon as possible.

The ABS indicator light may come on if you turn the rear wheel while the scooter is upright on the stand. This is normal. Turn the ignition switch OFF, then turn it ON. The indicator should come on, then go off after you run the scooter above 30 km/h (19 mph).

Inspection

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

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

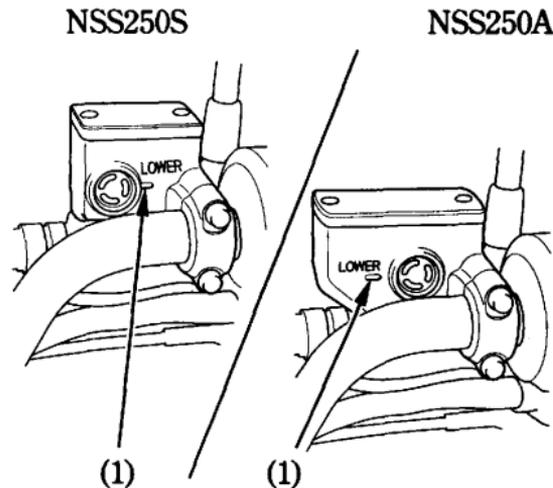
There are no adjustments to perform, but fluid level and pad wear must be inspected periodically. The system must be inspected frequently to ensure there are no fluid leaks. If the control lever free travel becomes excessive and the brake pads are not worn beyond the recommended limit (page 162), there 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 162).

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 4 brake fluid from a sealed container, or an equivalent.



(1) LOWER level mark

Rear Brake Fluid Level:

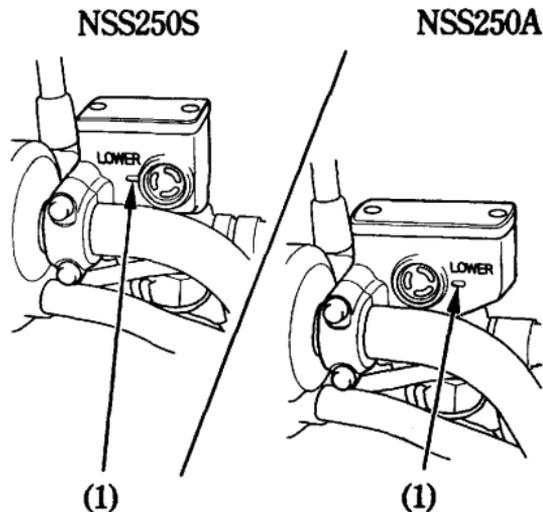
With the scooter in an upright position, check the fluid level. It should be above the LOWER level mark (1). If the level is at or below the LOWER level mark, check the brake pads for wear (page 163).

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 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

The owner must properly maintain the coolant to prevent freezing, overheating, and corrosion. Use only high quality ethylene glycol antifreeze containing corrosion protection inhibitors specifically recommended for use in aluminum engines. (SEE ANTIFREEZE CONTAINER LABEL).

Use only low-mineral drinking water or distilled water as a part of the antifreeze solution. Water that is high in mineral content or salt may be harmful to the aluminum engine.

Using coolant with silicate inhibitors may cause premature wear of water pump seals or blockage of radiator passages.

Using tap water may cause engine damage.

The factory provides a 50/50 solution of antifreeze and distilled water in this scooter. This coolant solution is recommended for most operating temperatures and provides good corrosion protection. A higher concentration of antifreeze decreases the cooling system performance and is recommended only when additional protection against freezing is needed. A concentration of less than 40/60 (40% antifreeze) will not provide proper corrosion protection. During freezing temperatures, check the cooling system frequently and add higher concentrations of antifreeze (up to a maximum of 60% antifreeze) if required.

Inspection

The reserve tank (1) is behind the right body cover.

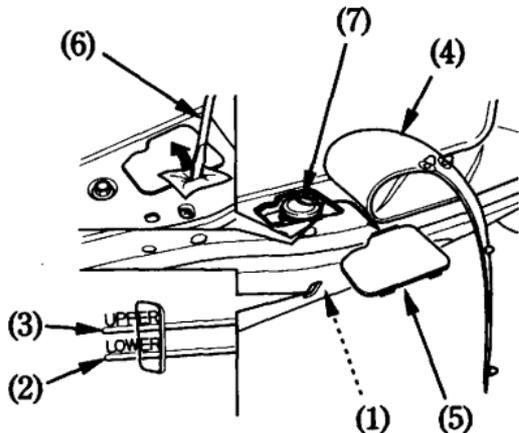
Check the coolant level in the reserve tank while the engine is at the normal operating temperature with the scooter in an upright position. If the coolant level is below the LOWER level mark (2), add coolant mixture until it reaches the UPPER level mark (3).

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.

To remove the reserve tank cap:

1. Remove the right floor mat (4).
2. Remove the reserve tank lid (5) using a flat head driver (6) with a protective cloth.
3. Remove the reserve tank cap (7).



- | | |
|----------------------|----------------------|
| (1) Reserve tank | (5) Reserve tank lid |
| (2) LOWER level mark | (6) Flat head driver |
| (3) UPPER level mark | (7) Reserve tank cap |
| (4) Floor mat | |

FUEL

Fuel Tank

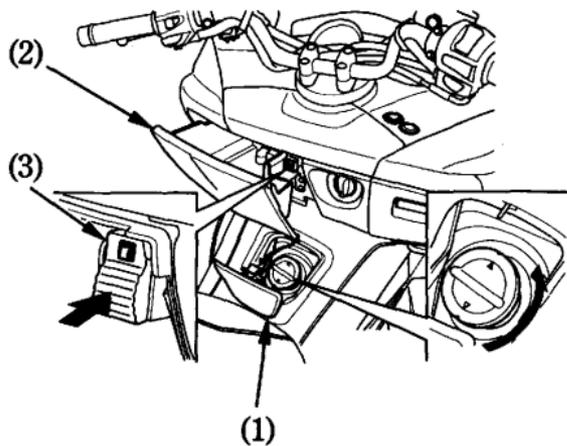
The fuel tank is located under the step board.

The fuel tank capacity including the reserve supply is:

12.0 l (3.17 US gal , 2.64 Imp gal)

To open the fuel tank lid (1), open the left console box (2) (page 104). Push the fuel lid opener (3).

Close the left console box.



- (1) Fuel tank lid
- (2) Left console box
- (3) Fuel lid opener

To open the fuel fill cap (4), rotate the fuel fill cap counterclockwise until it stops. Lift off the fuel fill cap.

Do not overfill the tank. There should be no fuel in the filler neck (5).

After refueling, be sure to tighten the fuel fill cap firmly by turning it clockwise.

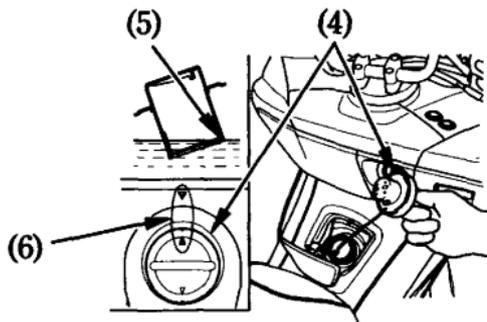
Make sure that the arrow marks (6) on the fuel fill cap and fuel tank are aligned.

Close the fuel tank lid.

⚠ 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) Fuel fill cap

(5) Filler neck

(6) Arrow marks

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.

Fuel system damage or engine performance problems resulting from the use of fuels that contain alcohol is not covered under the warranty. Honda cannot endorse the use of fuels containing methanol since evidence of their suitability is as yet incomplete.

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.

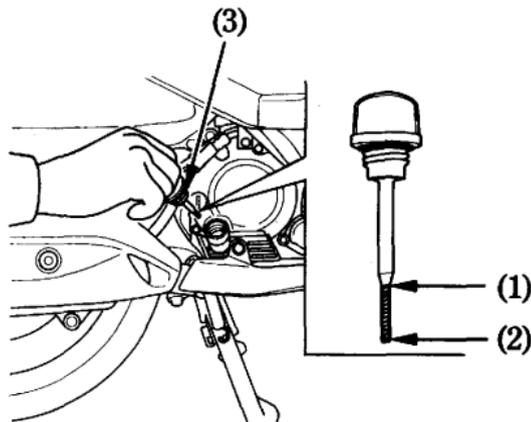
The level must be maintained between the upper (1) and lower (2) level marks on the oil filler cap/dipstick (3).

1. Start the engine and let it idle for 3–5 minutes. Make sure the low oil pressure indicator goes off. If the light remains on, stop the engine immediately.
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 148) 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.

⚠ 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.

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.

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.

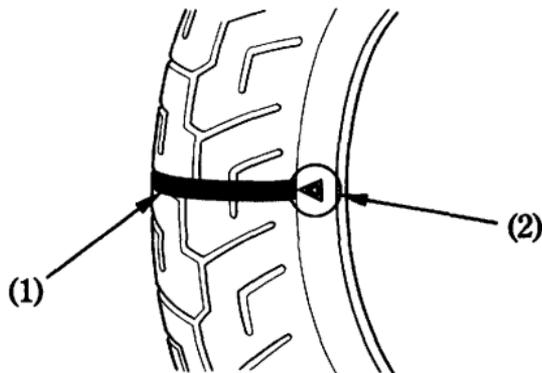
Tread Wear

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)

< For Germany >

German law prohibits use of tyres whose tread depth is less than 1.6 mm.



- (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 80 km/h (50 mph) for the first 24 hours, or 130 km/h (80 mph) at any time thereafter. 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: 110/90 – 13M/C 55P
BRIDGESTONE
HOOP B03 E
DUNLOP
SX01F JC

Rear: 140/70 – 13M/C 61P
BRIDGESTONE
HOOP B02 E
DUNLOP
SX01

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.

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

HONDA SMART CARD KEY SYSTEM

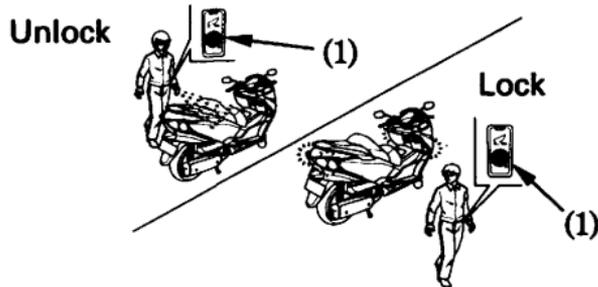
Honda Smart Card Key System

The Honda smart card key (1) system is a convenient system that allows the following operations without displaying the card key within the operating range. The system runs a two-way authentication between the scooter and the card key to verify the registered card key. If an improper ID card (or other device) is used, the Honda smart card key will not be authenticated. The Honda smart card key system protects your scooter from theft.

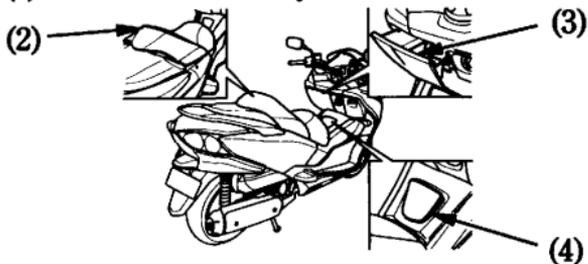
Low-Intensity Radio Waves

The Honda smart card key system uses low-intensity radio waves. It may affect medical equipment such as a cardiac pacemaker.

- To turn the ignition switch ON (See page 63), OFF or LOCK (See page 64).
- To open the front seat (2) lock (page 96), left console box (3) lock (page 104) and fuel lid (4) lock (page 43).



(1) Honda smart card key



(2) Front seat

(4) Fuel lid

(3) Left console box

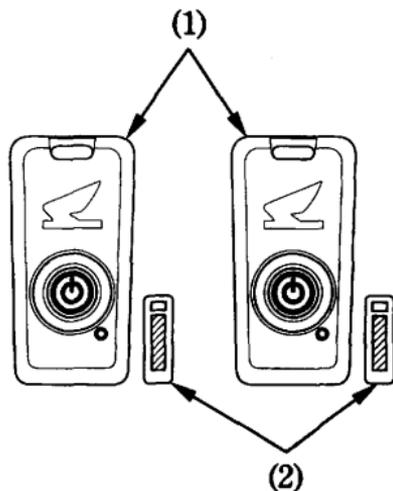
Honda Smart Card Key

Carrying the Honda smart card key (1) allows you to lock or unlock the ignition switch, and to release the front seat lock, the left console box lock, and fuel lid lock.

The ID number of the card key is on the ID tag (2) and the inside of the card key. You can also unlock the ignition switch (page 69) by inputting the ID number.

Always carry both the card key and ID tag, but store them in different places to avoid losing both at the same time.

Also store a copy of your ID number in a safe place other than your scooter.



- (1) Honda smart card key
- (2) ID tag

The Honda smart card key contains electronic circuits that are activated by the Honda smart card key system. If the circuits are damaged, the card key will not start the engine, release the ignition switch or open the front seat, left console box or fuel lid.

- Do not drop the card keys or set heavy objects on them.
- Protect the card key from direct sunlight, high temperature, and high humidity.
- Do not scratch or puncture.
- Do not store near any magnetized products such as a magnetized key chain.
- Always keep the card key away from electric appliances such as a TV, radio, PC or low-frequency massage device.
- Keep the card key away from liquids. If it gets wet, dry them immediately with a soft cloth.
- Do not burn.
- Do not wash in the ultrasonic cleaner.

- If fuel, wax, or grease adhere to the card key, wipe it off immediately to avoid cracking or warping.
- Do not disassemble the card key other than when changing a battery or to check the ID number. Only the cover of the card key can be disassembled. Do not disassemble other parts.

- Do not lose your card key. If you lose it, you will need to replace the Honda smart card key system unit.

We strongly recommend that you have your Honda dealer make a spare card key for you.

Your dealer will register the duplicate card key and system.

Card key operation may be interrupted if the card key is touched or covered by a metallic object.

The battery is drained any time the card key receives radio waves. The battery in the card key normally lasts about 2 years. However, the battery will drain in a shorter period if the card key continuously receives strong radio waves. Always keep the card key away from electric appliances such as a TV or PC.

You should always keep the Honda smart card key on your person.

Anyone in possession of the card key can start the engine and unlock the ignition switch, front seat lock, left console box lock and fuel lid lock if the card key is within operating range.

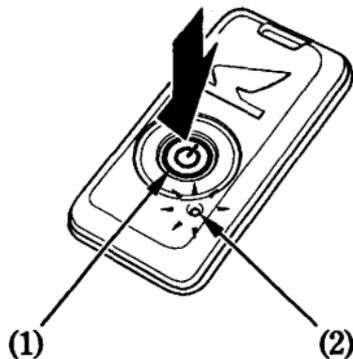
Switching the Honda Smart Card Key System

Press the ON/OFF switch (1) for more than 1 second to switch the card key system ON or OFF.

To check the system status, lightly press the ON/OFF switch. The indicator (2) will show the status.

When the indicator is:

Green	ID authentication can be operated
Red	ID authentication can not be operated

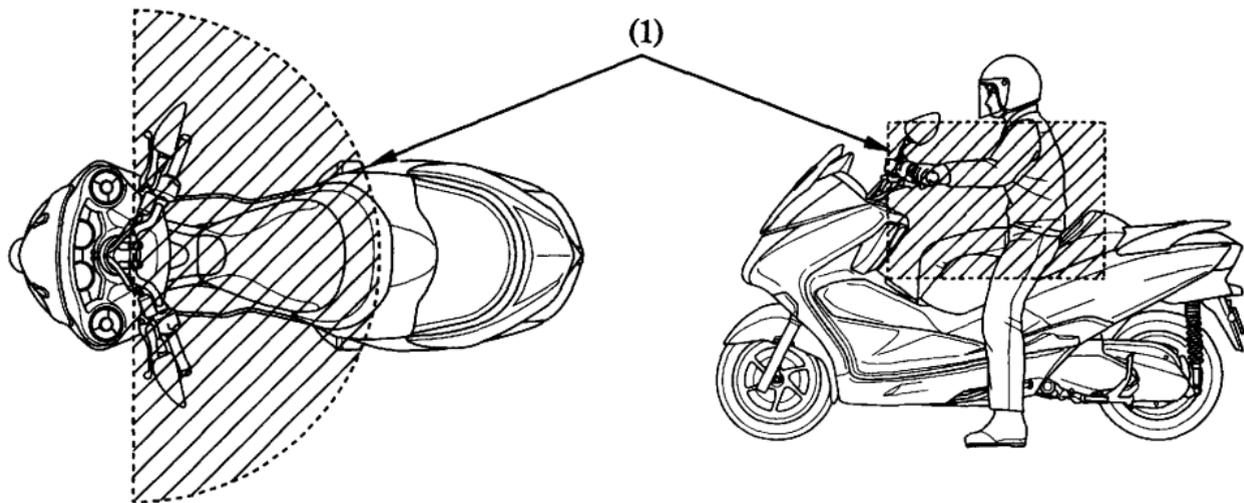


- (1) ON/OFF switch
(2) Indicator

Operating Range

Operating range when unlocked:

The system can be operated within the shaded area shown in the illustration.



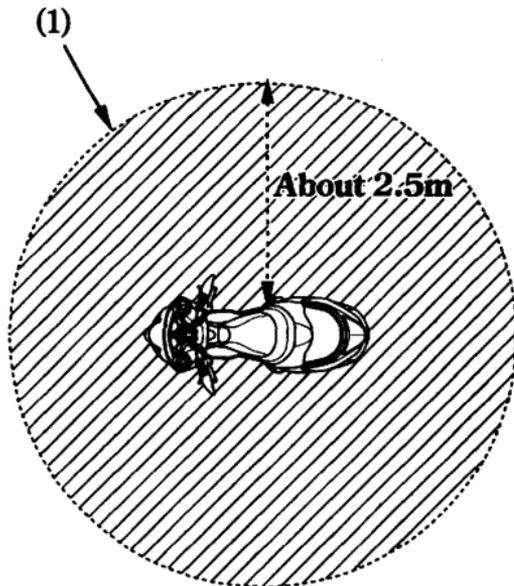
(1) Operating range when unlocked

Operating shutoff range when locked:

The system shutoff and locked when you are outside of a 2.5 m radius from the center of the wheelbase.

The card key system uses low-intensity radio waves, so the operating range can be wider or narrower according to the circumstances.

If the battery is low (or dead) or there are strong radio waves or noise, the operating range will be restricted or the system may not be activated.



(1) Operating shutoff range when locked

Honda Smart Card Key Indicator

When the ID is authenticated:

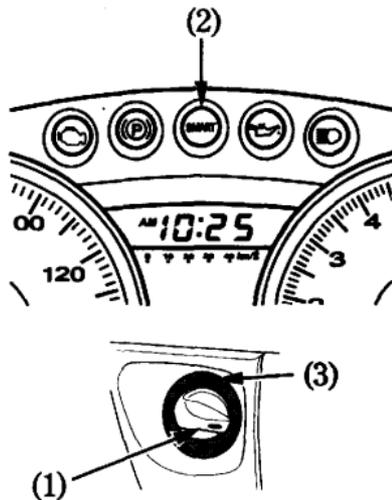
Push the ignition switch (1). When the ID is authenticated, the Honda smart card key indicator (2) lights and unlocks the ignition switch. When you turn the ignition switch ON, the Honda smart card key indicator will go off in 2 seconds and the engine can be started.

If the indicator does not go off, the engine can not be started.

When the engine stop switch is in the "X" (OFF) position and you turn the ignition switch ON, the card key indicator will not go off.

If any operation is not completed within 20 seconds after pushing the ignition switch in, the card key indicator will go off and the ignition switch will lock after the ignition switch illumination (3) and all turn signals flash twice.

Approximately 20 seconds after turning the ignition switch to OFF or LOCK from ON, the card key indicator goes off, and the ignition switch illumination and all turn signals flash twice. The ignition switch is then locked.



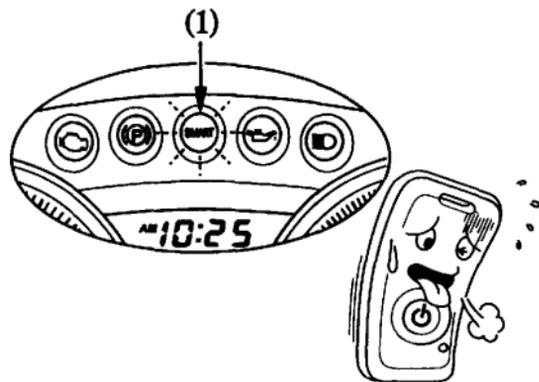
- (1) Ignition switch
- (2) Honda smart card key indicator
- (3) Ignition switch illumination

When the battery is low:

When the battery is low, the Honda smart card key indicator (1) flashes 5 times when you turn the ignition switch ON.

See page 74 for the battery replacement.

When the battery of the Honda smart card key is low (or dead), see page 69 for instructions to unlock the ignition switch.



(1) Honda smart card key indicator

Honda Smart Card Key has operating problems:

The Honda smart card key indicator flashes if you lose the card key while riding, if the battery is low, or if strong radio waves or noise are affecting the system. However, this does not affect the operation of your scooter.

Turning the ignition switch OFF while the Honda smart card key indicator is flashing, locks the ignition switch.

If you do not have the card key, the ignition switch can be unlocked by using the mechanical key and the ID tag. See page 69.

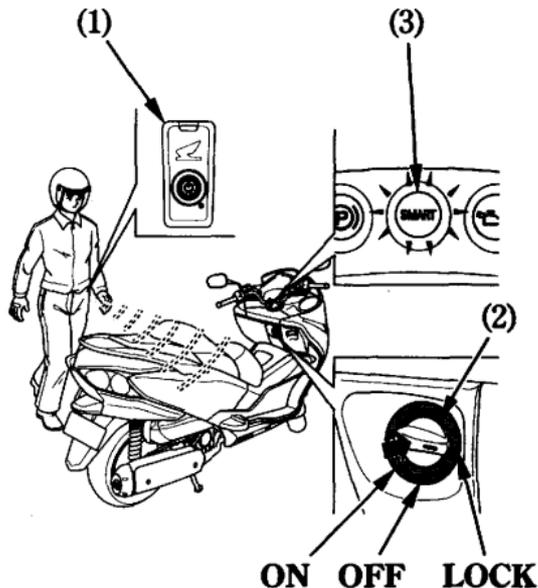
To Unlock the Ignition Switch

Enter operating range with the Honda smart card key (1).

1. With the engine stop switch in the “ \bigcirc ” (RUN) position, push the ignition switch (2). If the ID authentication is done properly, the Honda smart card key indicator (3) on the meter lights.
2. Turn the ignition switch to ON position.

When the Honda smart card key system does not work properly, see page 67 .

If someone without the card key tries to turn the ignition switch, the ignition switch rotates freely. If you notice the ignition switch is in a different position, turn the ignition switch to the original position (OFF or LOCK) and then push the ignition switch in.

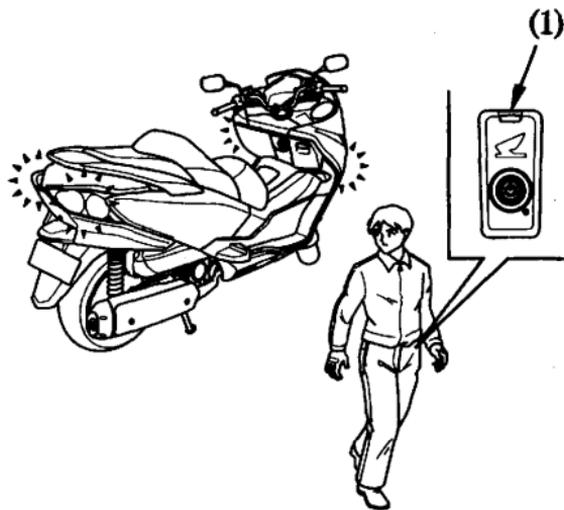


- (1) Honda smart card key
- (2) Ignition switch
- (3) Honda smart card key indicator

To Lock the Ignition Switch

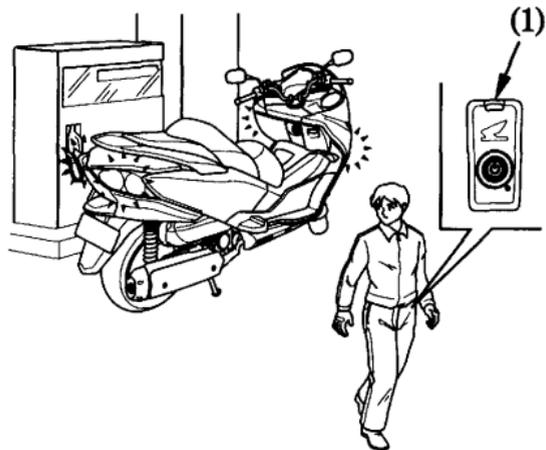
1. Turn the ignition switch to the OFF or LOCK position.
2. Leave the operating range with the Honda smart card key (1). The ignition switch illumination and all turn signals flash twice and then the ignition switch locks.

When the Honda smart card key system does not work properly, see page 67 .



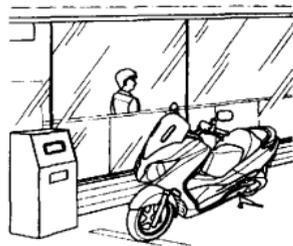
(1) Honda smart card key

When you leave your scooter in a restaurant or a gas station, lock the steering and take the Honda smart card key (1) with you. Make sure the all turn signals flash twice at this time.



(1) Honda smart card key

Anybody can unlock the ignition switch and start the engine if your card key is within operating range of your scooter, even if you are on the other side of a wall or window. If you are away from your scooter but your card key is still within operating range, turn off the Honda smart card key system. See page 58 for Switching Honda Smart Card Key System.



You should always keep the Honda smart card key on your person.

Anyone in possession of the card key can start the engine and unlock the ignition switch, front seat lock and console box lock if the card key is within operating range.

- If you leave your scooter with the ignition switch in the OFF position, the steering cannot be locked.
- If the ignition switch is in ON position, the ignition switch cannot be locked.
- If the battery is low or there are strong radio waves or noise, the operating range will be restricted or the system may not be activated.
- If any operation is not completed within 20 seconds after pushing the ignition switch in, the Honda smart card key indicator will go off and lock the ignition switch after the ignition switch illumination and all turn signals flash twice.
- Approximately 20 seconds after turning the ignition switch to OFF or LOCK from ON, the Honda smart card key indicator goes off, and the ignition switch illumination and all turn signals flash twice. Then the ignition switch will be locked.
- If the Honda smart card key is OFF, the Honda smart card key system cannot be activated even within the operating range.

When the Honda Smart Card Key System Does Not Work Properly

When the Honda smart card key system does not work properly, perform the following:

Honda Smart Card Key System is OFF:

Turn the Honda smart card key system ON. See page 58 for switching the Honda smart card key system.

When turning the ignition switch to ON, the Honda smart card key indicator flashes five times:

Replace the battery. See page 74 for replacing battery.

Used in an area surrounded by strong radio waves or noise:

There may be an interruption of operating. The Honda smart card key system uses low-intensity radio waves. The Honda smart card key system may not work properly in the following environments:

- There is strong electrical current nearby.
- You carry a cell phone, a laptop computer, or other electrical device.
- The card key is touching or covered by metal.

No battery inside or the battery is not placed properly:

Check the battery. See page 74 .

Authorized card key is not used:

The Honda smart card key system cannot be activated without an authorized card key. Use the authorized card key.

Broken card key is used:

See page 56 . If you use a broken card key, the Honda smart card key system cannot be activated. Use the spare card key.

The battery in your scooter is weak or low:

This may cause interruption of operating. See your Honda dealer.

If the Honda smart card key system cannot be activated due to other causes, see your Honda dealer.

To unlock the ignition switch in an emergency, see page 69 .

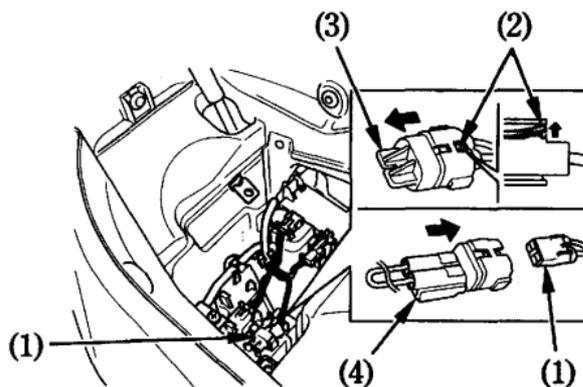
To unlock the front seat lock and left console box lock using a mechanical key, see page 94 .

Unlock the Ignition Switch For an Emergency

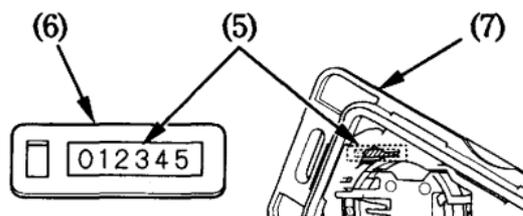
Set up:

1. Use the mechanical key to open the front seat (page 94) and remove the mat.
2. Remove the battery cover (page 166).
3. Pull out the blue connector (1) and release the tab while lifting the hook (2). Remove the blue dummy connector (3).
4. Connect the EM connector (4) in the tool kit to the connector.
5. Check the ID number (5) which is on the ID tag (6) or the inside of the Honda smart card key (7).

To check the ID number which is inside of the card key, see page 75 .



- | | |
|----------------------|----------------------------|
| (1) Connector (blue) | (3) Dummy connector (blue) |
| (2) Hook | (4) EM connector |



- | | |
|---------------|--------------------------|
| (5) ID number | (7) Honda smart card key |
| (6) ID tag | |

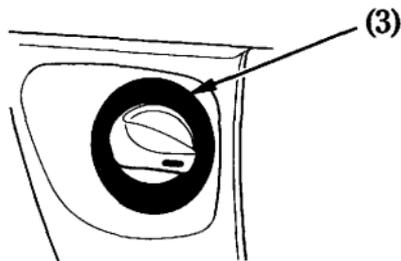
Input:

Example: ID number [012345]

Press the seat lock release button (1) desired number times and then press the ignition switch (2) once to fix.

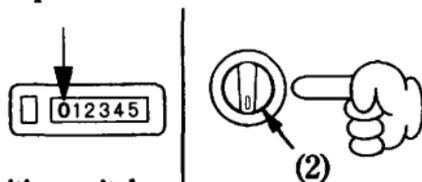
1. Press the ignition switch. Ignition switch illumination lights blue. Enter the ID number input mode.

- If the ignition switch illumination (3) does not light blue, the battery may be low. See your Honda dealer.



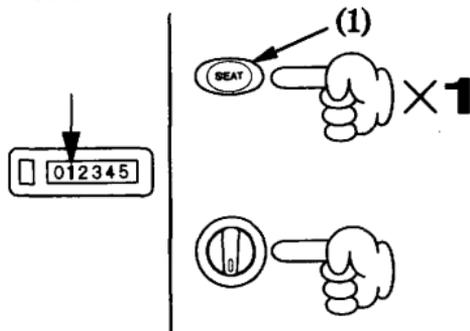
(3) Ignition switch illumination

2. Press the ignition switch once without pressing the seat lock release button. This operation indicates "0".



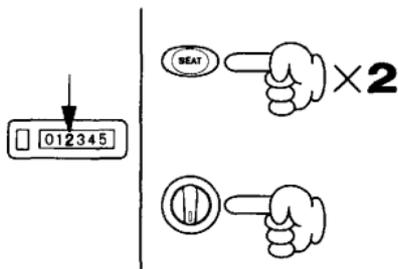
(2) Ignition switch

3. Press the seat lock release button once and press the ignition switch once. This operation indicates "1".

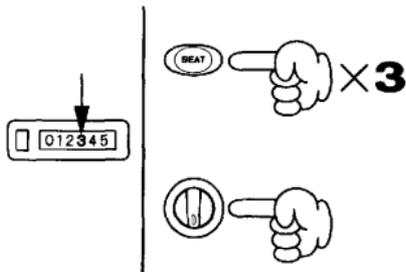


(1) Seat lock release button

4. Press the seat lock release button twice and press the ignition switch once. This operation indicates "2".



5. Press the seat lock release button 3 times and press the ignition switch once. This operation indicates "3".



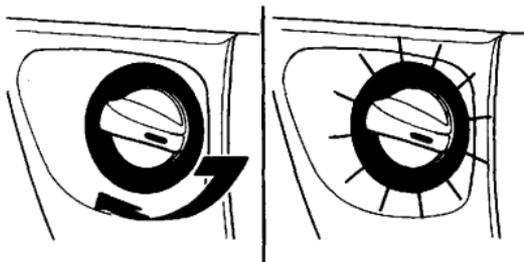
6. Input the remaining numbers by following the procedure mentioned above. Unlock the ignition switch when the ID number is checked through. You can start the engine.

- When unlocking in ID number input mode, you can turn the ignition switch only one time.

7. Be sure to remove the EM connector and return the dummy connector.

If the ID number is not checked through, the ignition switch illumination does not flash blue and the ignition switch can not be unlocked.

Pull out the EM connector and reconnect it to the connector. Follow the procedure again.



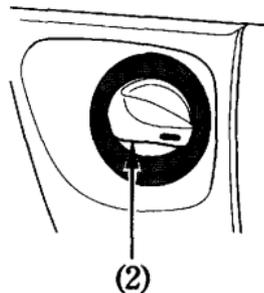
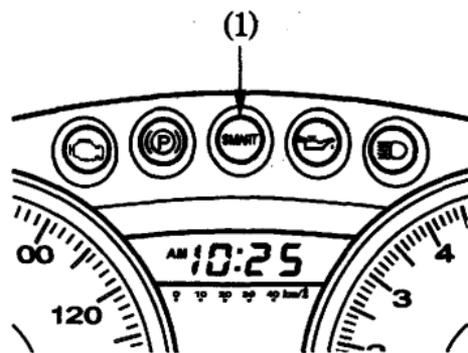
- Do not connect the EM connector except when unlocking in the ID number input mode.
- In case of emergency, store the removed EM connector in the tool kit.

When the Honda Smart Card Key Indicator Flashes

The Honda Smart Card Key indicator (1) flashes if the card key is lost while riding, if the battery is low, or because the system is affected by strong radio waves or noise.

However, this does not affect the operation of your scooter.

With the scooter parked, turn the ignition switch (2) to OFF or LOCK while the Honda smart card key indicator is flashing. This locks the ignition switch.

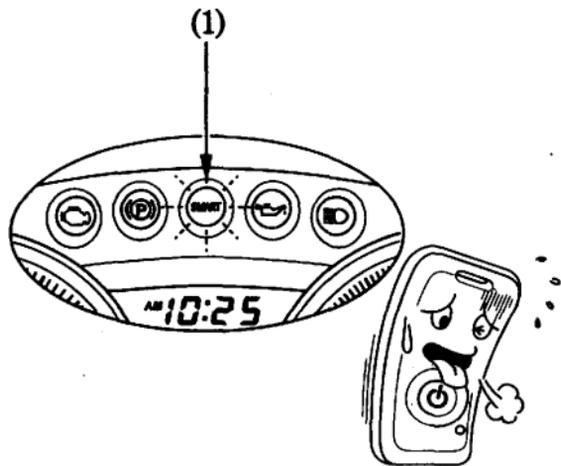


- (1) Honda smart card key indicator
- (2) Ignition switch

Replacing the Honda Smart Card Key Battery

When the Honda smart card key indicator (1) flashes 5 times or the operating range becomes unstable, replace the battery.

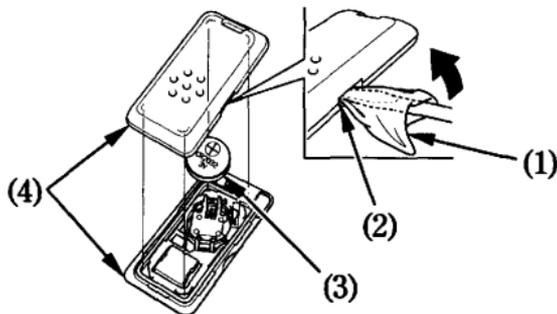
Battery type: CR2032



(1) Honda smart card key indicator

To replace the battery:

1. With the ON/OFF switch facing down, remove the side facing you while keeping hold of the main body.
2. Dismantle by inserting a coin or a flat head screwdriver covered with a protective cloth (1) into the slit (2) on the right side of the card key body.
3. Replace the old battery with a new battery (3) with the + side facing up.
4. Snap the two halves of the card key body (4) back together.



(1) Protective cloth
(2) Slit

(3) Battery
(4) Card key body

- Avoid damage to the Honda smart card key body by using a protective cloth.
- Place the battery properly with the + side up.
- Do not touch the circuit or terminal. This may cause problems.
- Be careful to avoid scratching the waterproof covering or allowing dust to enter.
- Do not forcibly replace the battery.

EC Directives

This Honda smart card key system complies with the R & TTE (Radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity) Directive.

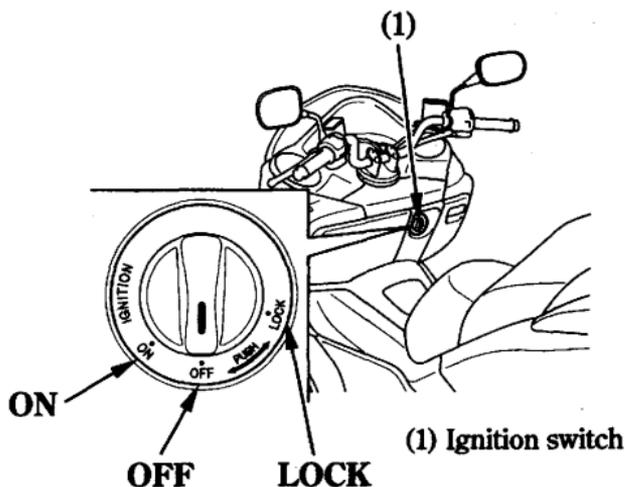


The declaration of conformity to R & TTE Directive is provided to the owner at the time of purchase. The declaration of conformity should be kept in a safe place. If the declaration of conformity is lost (or if it was not provided), contact your Honda dealer.

IGNITION SWITCH

Operate the ignition switch (1) to activate the switch and the intermittence of electric circuit.

The headlight, position light, taillight and license light will come on whenever you turn the ignition switch ON. If your scooter is stopped with the ignition switch ON and the engine is not running, the headlight, position light, taillight and license light will still be on, resulting in battery discharge.



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

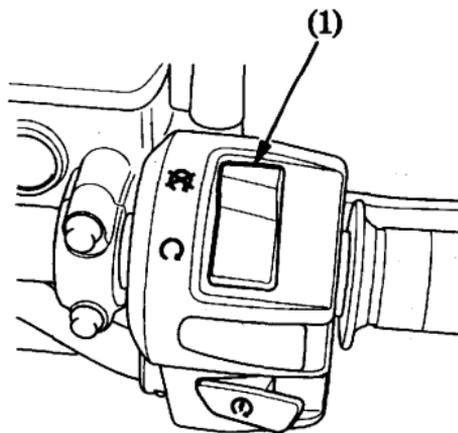
RIGHT HANDLEBAR CONTROLS

Engine Stop Switch

The engine stop switch (1) is next to the throttle grip. When the switch is in the

○ (RUN) position, the engine will operate. When the switch is in the ☒ (OFF) position, the engine will not operate. This switch is intended primarily as a safety or emergency switch and should normally remain in the ○ (RUN) position.

If your scooter is stopped with the ignition switch ON and the engine stop switch ☒ (OFF), the headlight, position light, taillight, and license light will still be on, resulting in battery discharge.

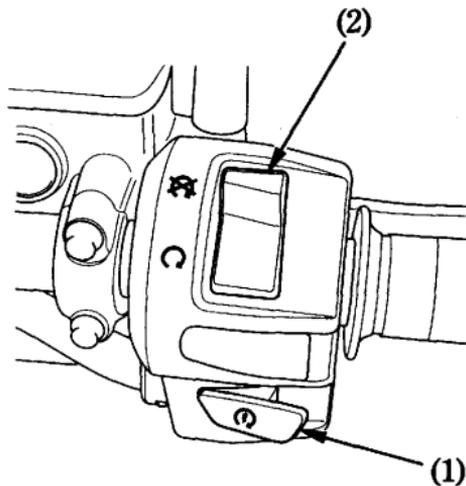


(1) Engine stop switch

Start Button

The start button (1) is below the engine stop switch (2).

When the start button is pressed, the starter motor cranks the engine. If the engine stop switch is in the  (OFF) position, the starter motor will not operate. See page 112 for the starting procedure.



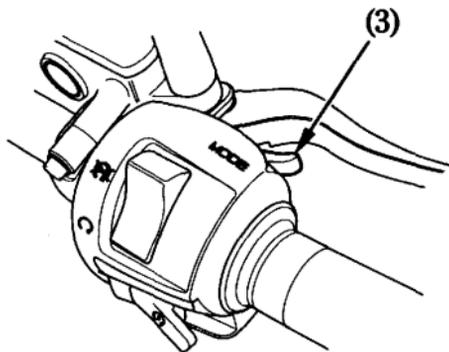
(1) Start button

(2) Engine stop switch

Mode Shift Switch (NSS250A)

To shift between the automatic shift mode and 7-speed automatic mode, press the mode shift switch (3).

This switch is also used to change the 7-speed manual mode to 7-speed automatic mode.



(3) Mode shift switch

LEFT HANDLEBAR CONTROLS

Headlight Dimmer Switch (1)

Push the dimmer switch to  D (HI) to select high beam or to  D (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.

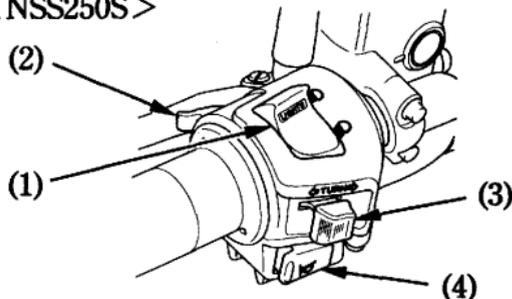
Turn Signal Switch (3)

Move to  to signal a left turn,  to signal a right turn. Press to turn signal off.

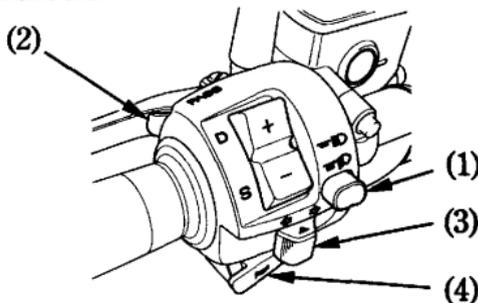
Horn Button (4)

Press the button to sound the horn.

<NSS250S>



<NSS250A>



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

Shift Switch (5) (NSS250A)

When the Automatic Shift Mode is selected:
Press the shift switch to select the D mode or S mode.

When the 7-speed Automatic Mode is selected:
Press the shift switch to select the 7-speed Manual Mode.

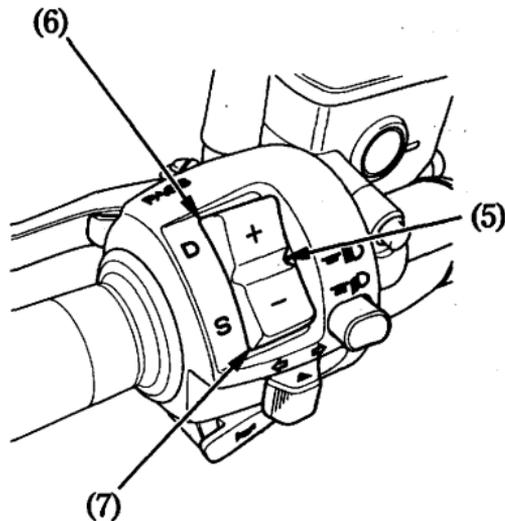
When the 7-speed Manual Mode is selected:
Press the shift switch to shift the gear between 1st and 7th.

Shift switch (+) (6):

- Automatic shift mode: select the D mode.
- 7-speed automatic mode: select the 7-speed manual mode.
- 7-speed manual mode: shift up.

Shift switch (-) (7):

- Automatic shift mode: select the S mode.
- 7-speed automatic mode: select the 7-speed manual mode.
- 7-speed manual mode: shift down.



- (5) Shift switch
- (6) Shift switch (+)
- (7) Shift switch (-)

Honda S Matic SYSTEM (NSS250A)

Honda S Matic System

Honda S matic is a computerized control system with three selectable modes, automatic shift mode, 7-speed automatic mode and 7-speed manual mode.

Automatic shift mode has two options; D mode and S mode.

Automatic Shift Mode:

In this mode you can shift automatically between low speed and high speed depending on the throttle opening and the vehicle speed. D mode and S mode can be selected.

D Mode:

Select for normal riding and fuel efficient riding.

S Mode:

Select when you need driving force (when you are going up a steep hill, or stop-and-go riding or riding with a passenger).

Enable for powerful riding.

7-speed Automatic Mode:

In this mode you can shift automatically depending on the throttle opening, the vehicle speed and engine revolutions between 1st and 7th speed.

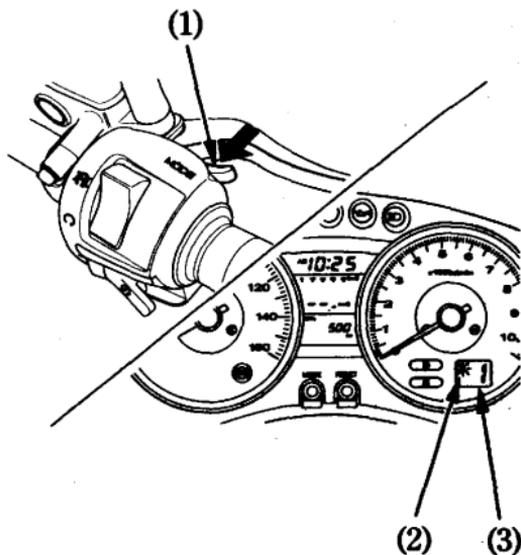
7-speed Manual Mode:

In this mode, the rider can shift up and down manually in seven-stages with the use of the shift switch. For sporty riding.

Switching Between Automatic Shift Mode and 7-speed Automatic Mode

Switching Automatic Shift Mode to 7-speed Automatic Mode:

Press the mode shift switch (1) once. The “A” icon mark (2) appears on the shift information display (3). When switching automatic shift mode to 7-speed automatic mode, the gear is switched to the suitable position.



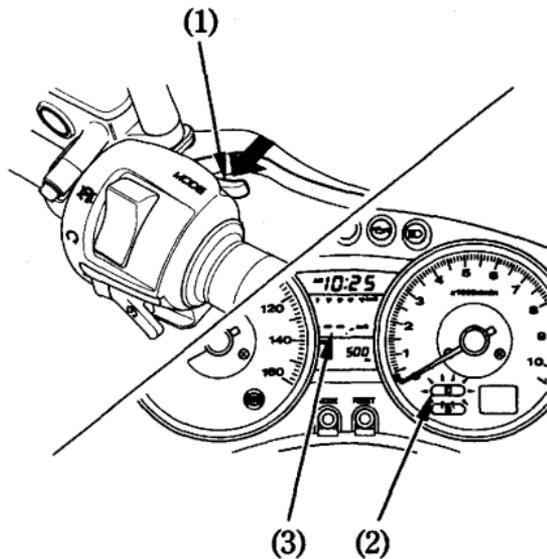
- (1) Mode shift switch
- (2) “A” icon mark
- (3) Shift information display

Switching 7-speed Automatic Mode to Automatic Shift Mode:

Press the mode shift switch (1) once. The D mode indicator (2) lights.

When switching 7-speed automatic mode to automatic shift mode, the D mode is always selected.

- When turning the ignition switch ON, the D mode is always selected.
- When switching the engine stop switch from “” (OFF) to “” (RUN) while the ignition switch is ON, the D mode is always selected.
- If you press and hold the mode switch, the sequential mode switching can not be done.
- When switching automatic shift mode to 7-speed automatic mode, the engine rev will fluctuate for selecting the suitable gear position for the speed.

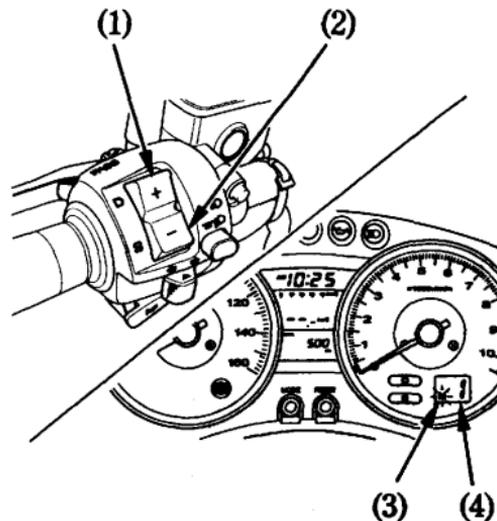


- (1) Mode shift switch
- (2) D mode indicator
- (3) Current fuel consumption meter

Switching Between 7-speed Automatic Mode and 7-speed Manual Mode

Switching 7-speed Automatic Mode to 7-speed Manual Mode:

Press the shift switch (+) (1) or (-) (2) once. The “M” icon mark (3) appears on the shift information display (4). When you press the shift switch (+) and change to the 7-speed manual mode, you can shift the upper gear. When you press the shift switch (-) and change to the 7-speed manual mode, you can shift the lower gear.

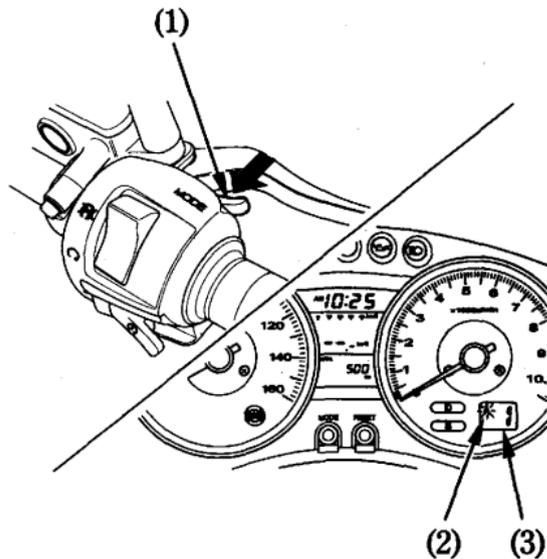


- (1) Shift switch (+)
- (2) Shift switch (-)
- (3) “M” icon mark
- (4) Shift information display

Switching 7-speed Manual Mode to 7-speed Automatic Mode:

Press the mode shift switch (1) once. The "A" icon mark (2) appears on the shift information display (3).

- You cannot change 7-speed manual mode to automatic shift mode directly.
- If you press and hold the mode switch, the sequential mode switching can not be done.



- (1) Mode shift switch
(2) "A" icon mark
(3) Shift information display

Switching D Mode and S Mode When the Automatic Shift Mode Is Selected

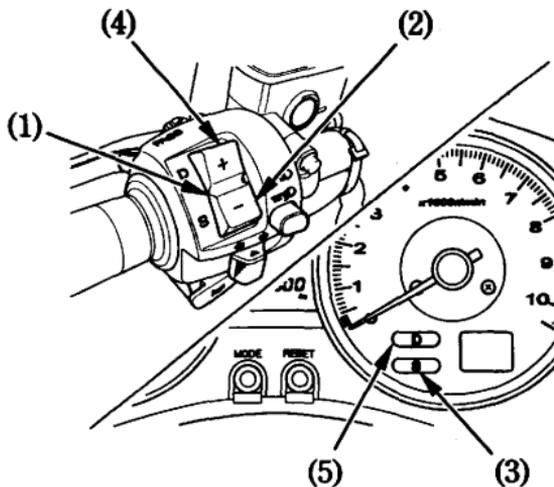
Press the shift switch (1) to change the D mode and the S mode while the automatic shift mode is selected.

Switching D mode to S mode:

Press the shift switch (-) (2) to switch to S mode and the S mode indicator (3) lights.

Switching S mode to D mode:

Press the shift switch (+) (4) to switch to D mode and the D mode indicator (5) lights.



(1) Shift switch

(2) Shift switch (-)

(3) S mode indicator

(4) Shift switch (+)

(5) D mode indicator

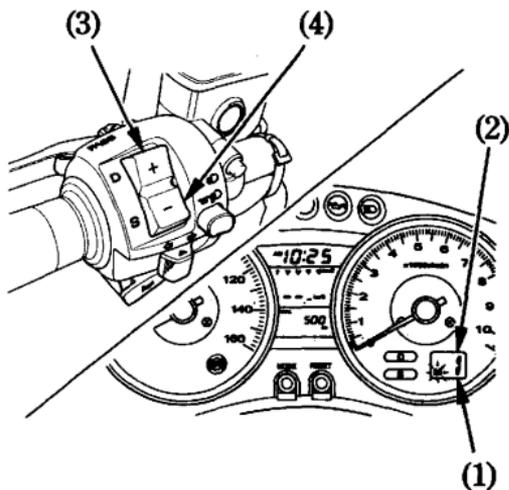
Shifting When the 7-speed Manual Mode Is Selected

Press the shift switch to shift gears when the 7-speed manual mode is selected. The shift indicator (1) shows the gear position on the shift information display (2).

When the 7-speed manual mode is selected, shifting is not automatic. Shift so as not to let the engine rev enter the red zone.

To upshift transmission, press the shift switch (+) (3) once.

To downshift transmission, press the shift switch (-) (4) once.

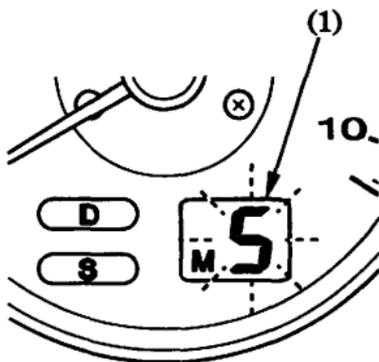


- (1) Shift indicator
- (2) Shift information display
- (3) Shift switch (+)
- (4) Shift switch (-)

Shifting Restriction:

If the system determines that the travel device will be damaged or there will be over revving of the engine while shifting, the shift indicator (1) flashes and shifting can not be done.

- Operating the shift switch (+) or (-) once changes one gear. The sequential shifting cannot be done if the shift switch (+) or (-) is pressed and held. If changing gear continuously, take your finger off the shift switch (+) or (-) and then press the shift switch (+) or (-) again.
- If your speed becomes too slow in the 7-speed manual mode, it shifts down automatically.

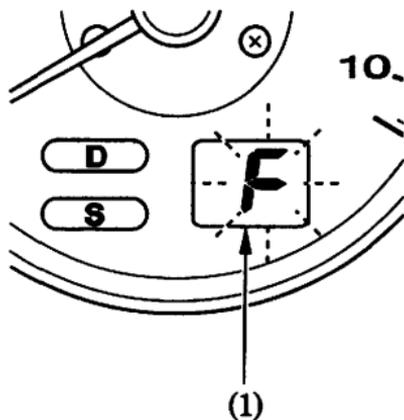


(1) Shift indicator

If There Is a Failure In Honda S Matic

If switching D mode and S mode cannot be done in the automatic shift mode or shifting cannot be done in the 7-speed manual or automatic mode, "F" lights or flashes on the shift information display (1) to indicate a failure in Honda S matic. See your Honda dealer as soon as possible.

- Due to the location of a fault, traveling will be restricted to an equivalent of D mode or manual 1st speed. It will not be possible to travel at the usual riding speed.



(1) Shift information display

FEATURES

(Not required for operation)

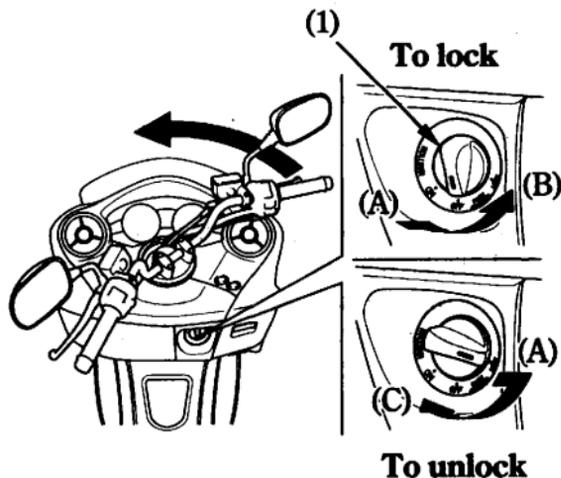
STEERING LOCK

To lock the steering, turn the handlebar all the way to the left, turn the ignition switch (1) to LOCK while pushing in.

The ignition switch will lock when leaving with Honda smart card key from the operating range. All of the turn signals flash twice to help you to know it was locked.

To unlock the steering, turn the ignition switch to OFF while pushing in, when the Honda smart card key system is working.

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



(1) Ignition switch

(A) Push in

(B) Turn to LOCK

(C) Turn to OFF

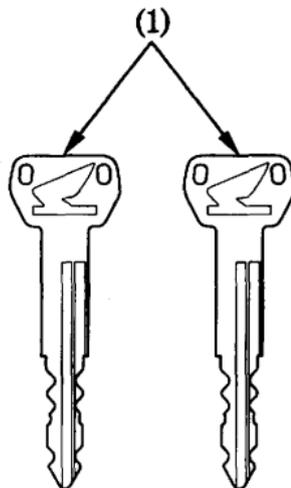
MECHANICAL KEY

This scooter has two mechanical keys.

Use the mechanical key to unlock the front seat lock and the console box without using a card key when the card key is lost, the battery is low (or dead) or doing maintenance. In case the battery runs flat or the card key is lost, take along the mechanical key (1) and ID tag (see page 69) separately.

See your Honda dealer when the mechanical key is lost.

- Mechanical key does not have the functions of Honda smart card key system.
- Do not store the mechanical key in the center compartment or the left console box. The mechanical key is used to unlock the ignition switch for an emergency (page 69).

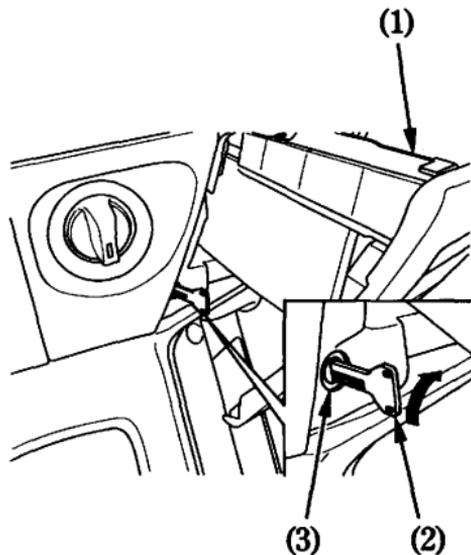


(1) Mechanical key

To unlock the front seat lock and the left console box lock:

1. Open the right console box (1) (page 102).
2. Insert the mechanical key (2) into the key cylinder (3) and turn it clockwise. The front seat lock and the left console box will unlock at the same time.

Make sure the front seat lock and left console box are securely locked before riding.



- (1) Right console box
- (2) Mechanical key
- (3) Key cylinder

PARKING BRAKE

The scooter is equipped with a parking brake.

To Apply the Parking Brake:

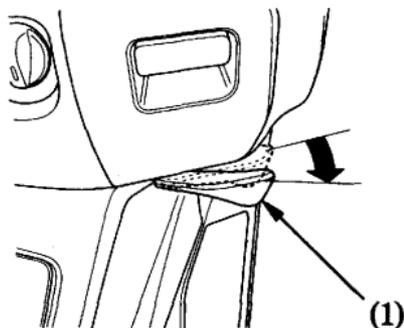
Pull in the parking brake lever (1) to lock the rear wheel.

To Release the Parking Brake:

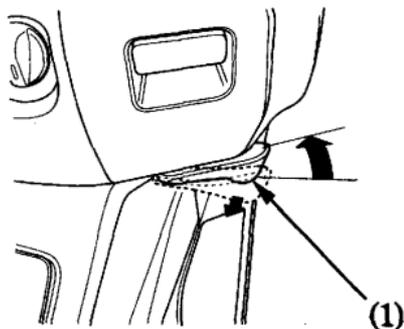
Release the parking brake lever (1) while lightly pulling in the lever.

Before riding, check that the parking brake indicator is turned OFF and make sure that the rear brake is fully released so there is no drag on the rear wheel.

To apply



To release



(1) Parking brake lever

SEAT

Front seat

If the ignition switch is ON position, front seat will not open.

The seat lock release button (1) is located on the rear meter panel. Make sure that the Honda smart card key is ON (page 58) and enter the operating range with the card key. To lift the front seat (2), press the seat lock release button while the ignition switch is in the OFF or LOCK position. Pull up the front seat.

To lock the front seat, lower and push down on it until it locks.

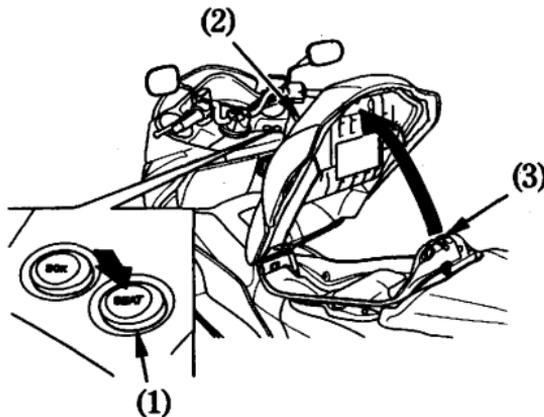
Make sure the front seat is closed securely. (NSS250A)

If not closed, the trunk light will remain lit if the trunk light switch is I (ON), resulting in battery discharge.

Do not place luggage or clothing near the seat catch (3). It could make the seat

difficult to open if it gets caught between the seat hook and catch while closing the seat.

Do not put the card key, mechanical key and ID tag in the center compartment. The card key, mechanical key or ID tag may be locked in the compartment and the card key system may not be activated.



- (1) Seat lock release button (3) Seat catch
(2) Front seat

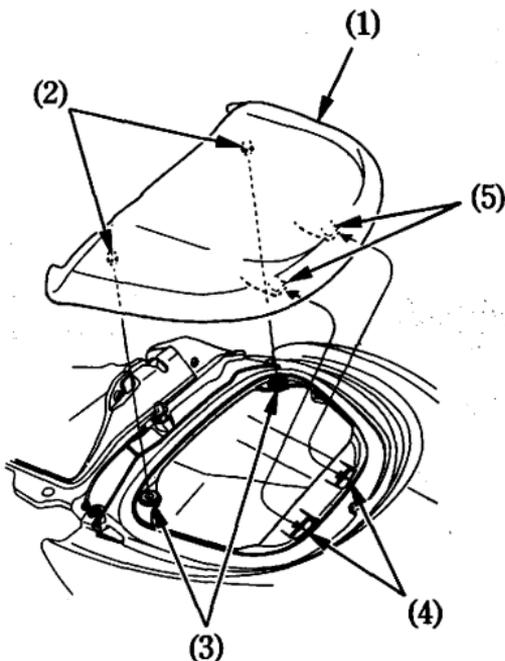
Rear seat

To remove the rear seat (1), open the front seat (page 96). Unlock the prongs (2) from grommets (3), and pull the rear seat forward and up.

To install the rear seat, align the recesses (4) with the tabs (5). Push the prongs into grommets.

Do not put the card key, mechanical key and ID tag under the rear seat.

The card key, mechanical key or ID tag may be locked in the compartment and the card key system may not be activated.



- (1) Rear seat
- (2) Prongs
- (3) Grommets

- (4) Recesses
- (5) Tabs

HELMET HOLDER

The helmet holder eliminates the need for carrying your helmet after parking.

Open the front seat (page 96).

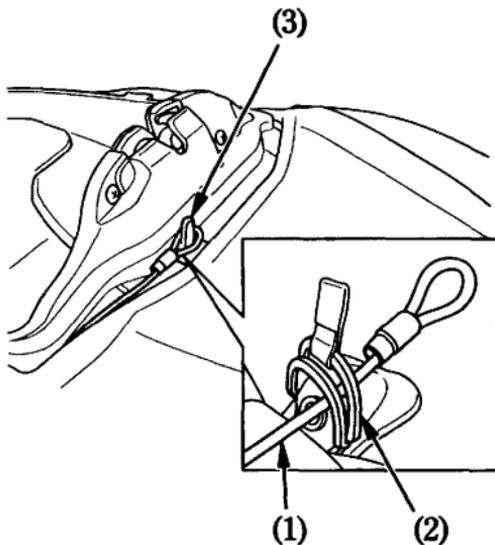
Route the helmet wire (1) through the helmet D-ring (2) and hook the loop of the helmet wire onto the helmet holder (3).

Close the front seat and lock it securely.

⚠ 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.



- (1) Helmet wire
- (2) Helmet D-ring
- (3) Helmet holder

CENTER COMPARTMENT

The center compartment (1) is below the seat. Opening and closing the seat: See "SEAT" (page 96).

MAXIMUM WEIGHT LIMIT:

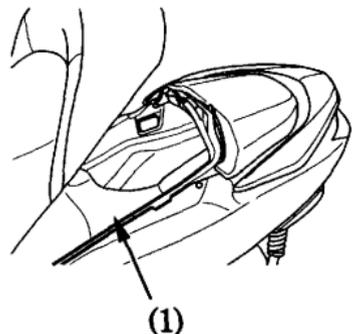
10 kg (22 lbs)

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

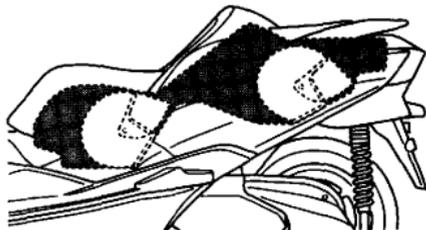
You can store the two helmets in the center compartment.

Store helmets as shown in the following illustration.

If you store helmets wrongly, they will interfere with the front seat.



(1) Center compartment



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.

Some helmets may not be stored in the compartment due to their size or design.

Make sure the front seat is closed securely. (NSS250A)

If not closed, the trunk light will remain lit if the trunk light switch is | (ON), resulting in battery discharge.

Do not put the card key, mechanical key and ID tag in the center compartment.

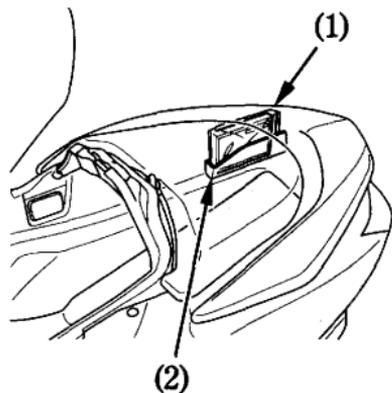
The card key, mechanical key or ID tag may be locked inside and the card key system may not be activated.

DOCUMENT BAG

The document bag (1) is in the document compartment (2) under the rear seat (page 97).

This owner's manual and other documents should be stored in the document bag. When washing your scooter, be careful not to flood this area with water.

Do not put the card key, mechanical key and ID tag under the rear seat.

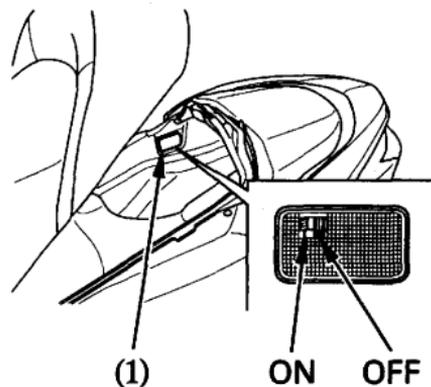


- (1) Document bag
- (2) Document compartment

TRUNK LIGHT (NSS250A)

The trunk light (1) will be turned ON automatically when the front seat is opened. It is kept ON as long as the front seat is opened regardless of the position of the ignition switch.

The trunk light can be cancelled if the trunk light switch is at \bigcirc (OFF) position, either seat is open.



- (1) Trunk light

RIGHT CONSOLE BOX

There is a right console box (1) below the right side of the handlebar.

The maximum allowable load in the right console box and left console box shall be no more than

1.5 kg (3.3 lbs).

Do not open the right console box while riding the scooter.

To Open:

- Pull the knob (2) of right console box.

To Close:

- Press forward until it is firmly closed.

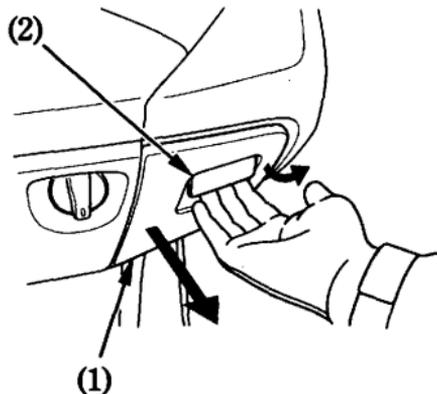
Do not put the card key, mechanical key and ID tag in the right console box.

The card key system may not be activated.

Make sure the right console box is closed before riding.

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

Do not store valuables or fragile articles in the right console box.



(1) Right console box

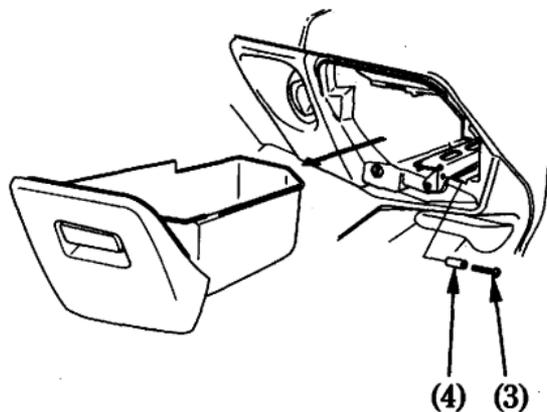
(2) Knob

To Remove:

1. Open the right console box.
2. Remove the screw (3) and collar (4).
3. Pull out the right console box.

To Install:

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



- (3) Screw
- (4) Collar

LEFT CONSOLE BOX

There is a left console box (1) below the left side of the handlebar.

The maximum allowable load in the right console box and left console box shall be no more than

1.5 kg (3.3 lbs).

Do not open the left console box while riding the scooter.

To Open:

Make sure the Honda smart card key is ON (page 58) and enter the operating range with card key.

Push the console box release button (2).

The left console box will come out slightly.

Push the left console box cover (3) gently so that you can pull it out fully.

If the left console box stops, pull it out with the notch (4).

When the left console box stops while pulling it out, push slightly and continue pulling.

To Close:

Press forward until it is firmly closed.

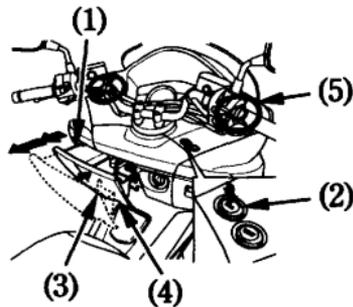
Do not put the card key, mechanical key and ID tag in the left console box.

The card key, mechanical key or ID tag may be locked inside and the card key system may not be activated.

Make sure the left console box is closed before riding.

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

Do not store valuables or fragile articles in the left console box.



- (1) Left console box
- (2) Left console box release button
- (3) Left console box cover
- (4) Notch
- (5) Speaker grill

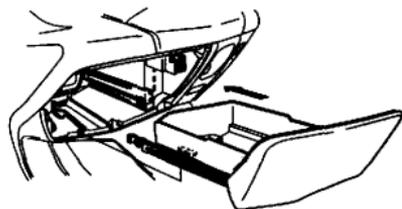
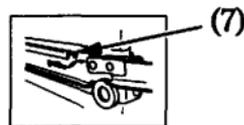
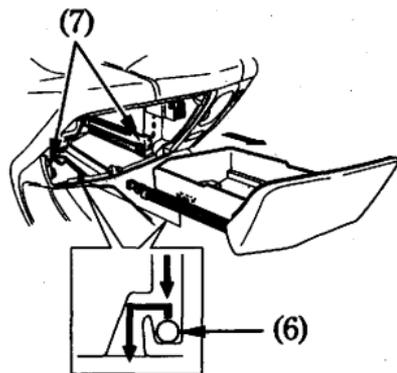
This scooter is equipped with the speaker grill (5) to store an audio system.
When you install an audio system, consult your Honda dealer.

To Remove:

1. Open the left console box (page 104).
2. Give a gentle push the left console box and slide the pin (6).
3. Remove the left console box from the guide (7).

To Install:

1. Close the left console box by fitting the guide in.



(6) Pin

(7) Guide

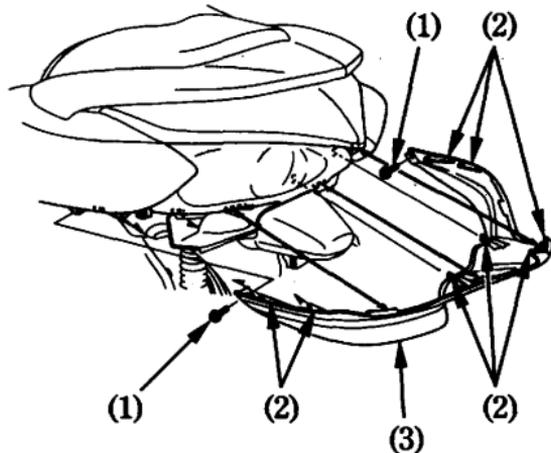
REAR BODY LOWER COVER

Removal:

1. Remove the screws (1).
2. Remove the hooks (2) by pulling back the rear body lower cover (3).
3. Remove the rear body lower cover.

Installation:

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



(1) Screws
(2) Hooks

(3) Rear body lower cover

FLOOR SIDE PANEL

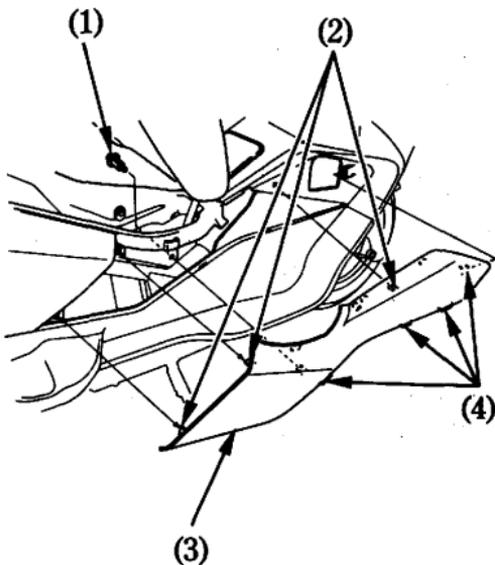
The right and left floor side panels can be removed in the same manner.

Removal:

1. Open the front seat (page 96).
2. Remove the clip (1) and hooks A (2).
3. Remove the floor side panel (3) by removing hooks B (4).

Installation:

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



(1) Clip
(2) Hooks A

(3) Floor side panel
(4) Hooks B

BODY COVER

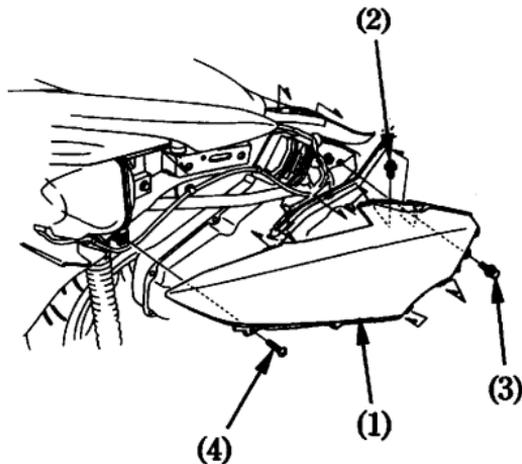
The right and left body covers can be removed in the same manner.

Removal:

1. Remove the rear body lower cover (page 106).
2. Remove the floor side panel (page 107).
3. Remove the body cover (1) by removing the clip (2), bolt (3) and screw (4).

Installation:

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



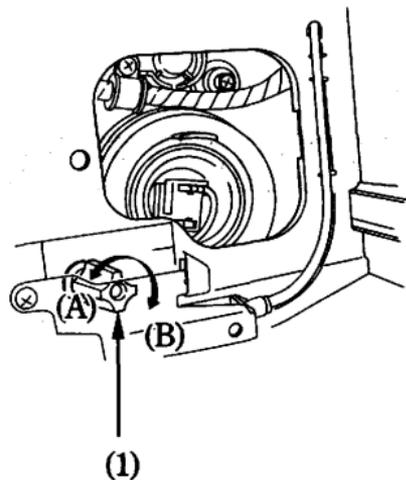
(1) Body cover
(2) Clip

(3) Bolt
(4) Screw

HEADLIGHT AIM VERTICAL ADJUSTMENT

Remove the maintenance lid (page 172).

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



(1) Knob

(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 47). Check for leaks.
2. Fuel level—fill fuel tank when necessary (page 43). Check for leaks.
3. Coolant level—add coolant if required. Check for leaks (pages 41 – 42).
4. Front and rear brakes—check operation; make sure there is no brake fluid leakage (pages 36 – 40).

5. Tyres—check condition and pressure (pages 48 – 53).
6. Throttle—check for smooth opening and full closing in all steering positions.
7. Lights and horn—check that headlight, brake/taillights, position light, license light, turn signals, indicators and horn function properly.
8. Engine stop switch—check for proper function (page 78).
9. Side stand ignition cut-off system—check for proper function (page 161).

STARTING THE ENGINE

Always follow the proper starting procedure described below.

This scooter is equipped with a side stand ignition cut-off system. The engine cannot be started if the side stand is down. A running engine will shut off if the side stand is lowered.

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.

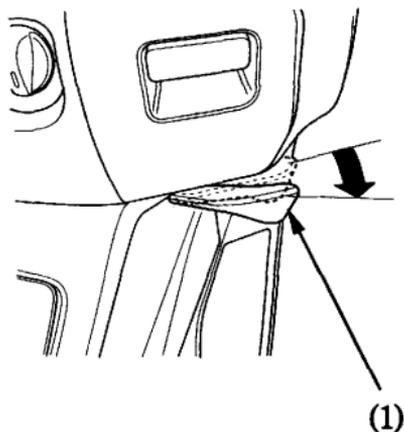
Do not use the electric starter for more than 5 seconds at a time. Release the start button for approximately 10 seconds before pressing it again.

1. Place the scooter on its center stand.
2. Lock the rear wheel by applying the parking brake lever (1).

⚠ CAUTION

Contact with the spinning rear wheel can cause you to be hurt.

Set the parking brake when the scooter is on its center stand.



(1) Parking brake lever

3. Enter operating range with the Honda smart card key.
4. Make sure that the engine stop switch is at  (RUN).
5. Push the ignition switch (2) once and turn to ON.

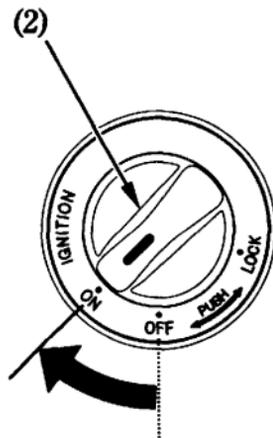
Confirm the following:

- The PGM-FI malfunction indicator lamp (MIL) is OFF.
- The parking brake indicator is ON.
- The low oil pressure indicator is ON.
- The high coolant temperature indicator is OFF.
- The Honda smart card key indicator is OFF.

The low oil pressure indicator should go off a few seconds after the engine starts. If the low oil pressure indicator lights during operation, stop the engine immediately and check the engine oil level.

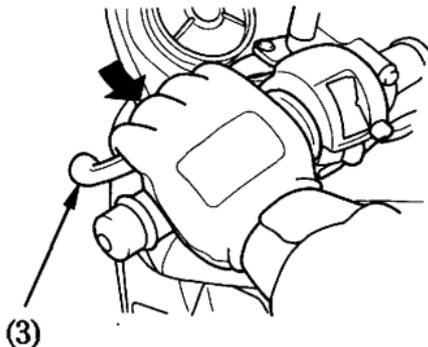
NOTICE

Operating the engine with insufficient oil pressure can cause serious engine damage.



(2) Ignition switch

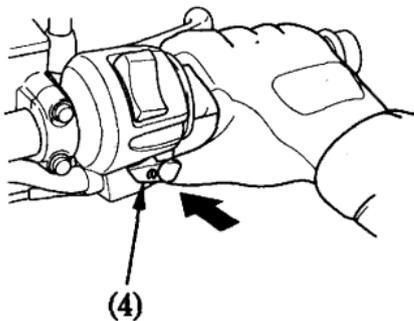
6. Squeeze the rear brake lever (3).
The electric starter will only work when the rear brake lever is squeezed and the side stand is up.



(3) Rear brake lever

7. With the throttle completely closed, push the start button (4).

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



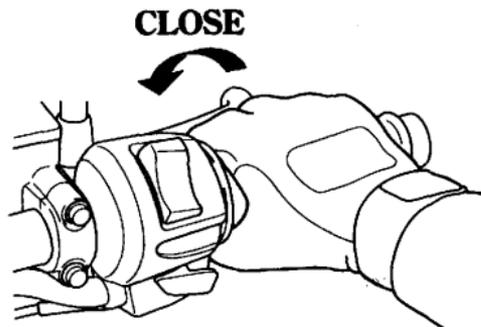
(4) Start button

8. Be sure to keep the throttle closed and the parking brake locked while warming up the engine.
9. Allow the engine to warm up before riding (See **"RIDING"**, page 119).

Do not "BLIP" the throttle (open and close rapidly) as the scooter will move forward suddenly.

Do not leave the scooter unattended while the engine is warming up.

Snapping the throttle or fast idling for more than about 5 minutes at normal air temperature may cause exhaust pipe discoloration.



Flooded Engine

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

1. Leave the engine stop switch set to  (RUN).
2. Open throttle fully.
3. Press the start button for 5 seconds.
4. Follow the normal starting procedure.
5. 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 – 4 again.

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.

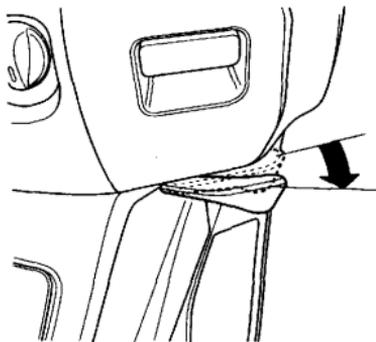
RIDING

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

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. Make sure the throttle is closed and the parking brake is locked before moving the scooter off the center stand.**

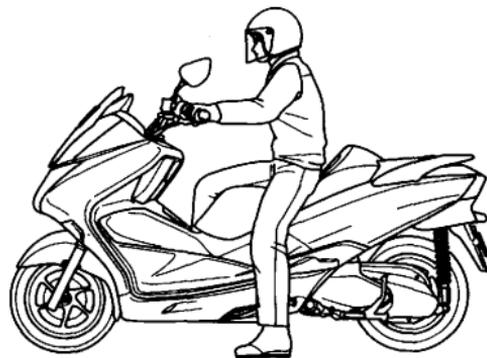
The rear wheel must be locked when moving the scooter off the center stand or loss of control may result.



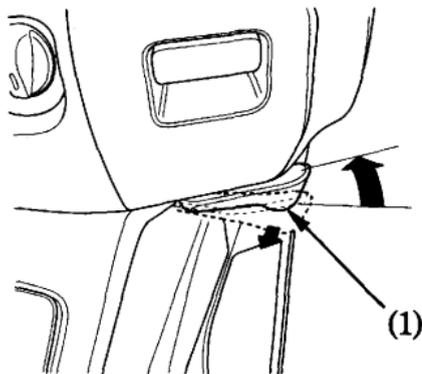
2. Stand on the left side of the scooter and push it forward and off the center stand.



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 parking brake lever (1).**



(1) **Parking brake lever**

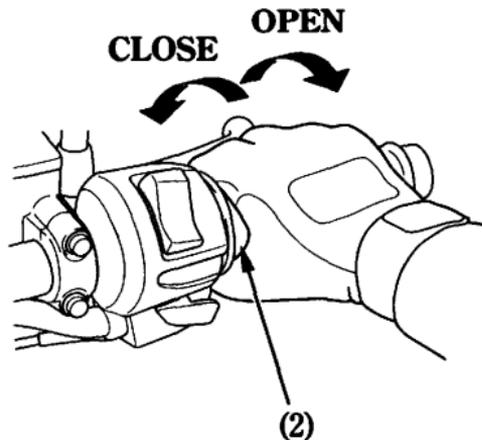
5. **Before starting off, indicate your direction with the turn signals, and check for safe traffic conditions.**
Grasp the handlebars firmly with both hands.

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

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.

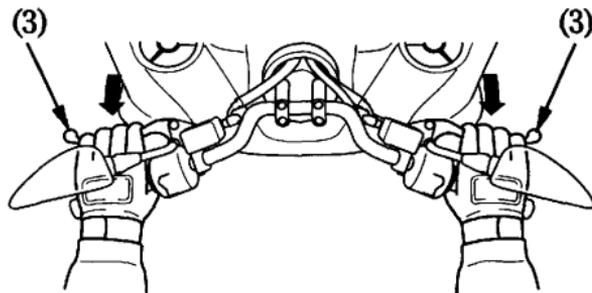
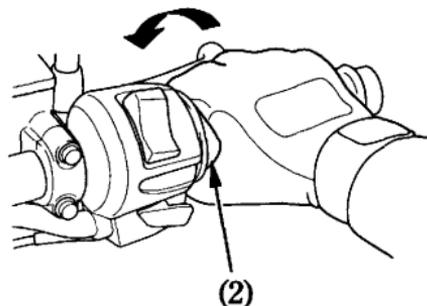


(2) Throttle

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.

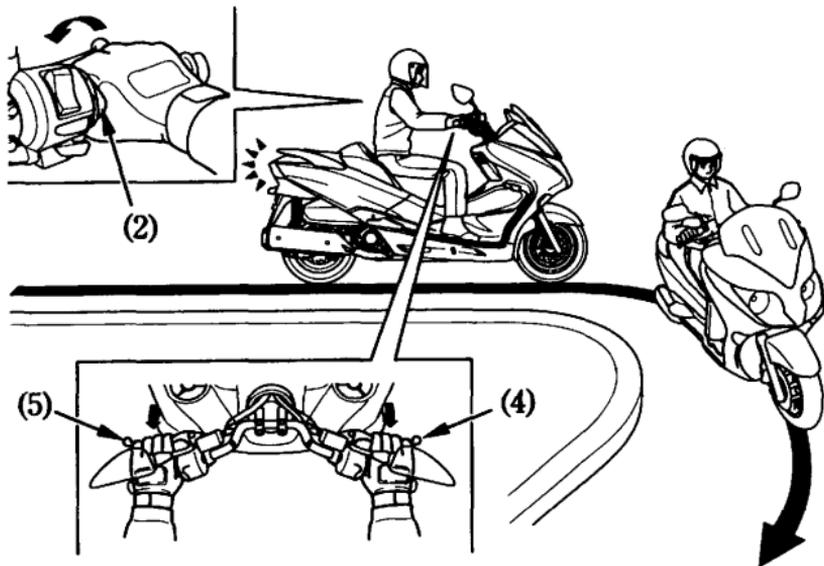
Excessive brake application may cause either wheel to lock, reducing control of the scooter.



(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 (4) and rear (5) brakes at the same time.

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



(2) Throttle (4) Front brake (5) Rear brake

11. Riding with Honda S Matic (NSS250A) Automatic Shift Mode

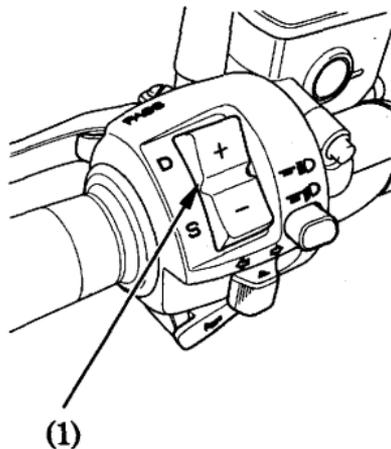
In this mode you can shift automatically depending on the throttle opening and the vehicle speed. Within automatic shift mode D mode and S mode can be selected.

Operate the shift switch (1) on the left handlebar control to change D mode and S mode depending on riding circumstances.

When going up hill, switch to S mode to enable more powerful riding depending on inclination of the rise.

7-speed Automatic Mode

In this mode you can shift automatically depending on the throttle opening, the vehicle speed and engine revolutions between 1st and 7th speed.



(1) Shift switch

7-speed Manual Mode

In this mode you can manually shift between 1st and 7th speed by operating the shift switch.

When going up hill, switch to a lower gear to enable more powerful riding depending on inclination of the rise.

Upshifting sequence:

To upshift transmission, press the shift switch (+) (1) once.

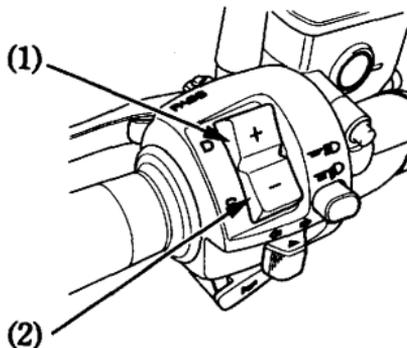
Shifting is not automatic in the 7-speed manual mode. Shift up not to let the engine rev enter the red zone.

Downshifting sequence:

To downshift transmission, press the shift switch (-) (2) once.

When passing, shift down to get powerful acceleration.

If your speed becomes too slow in the 7-speed manual mode, it shifts down automatically.



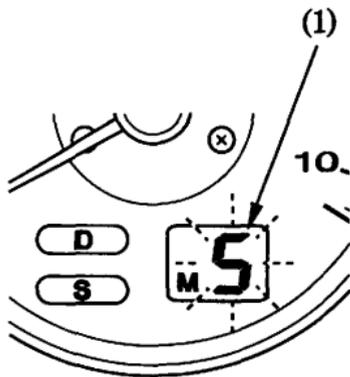
(1) Shift switch (+)

(2) Shift switch (-)

Shifting Restriction:

If the system determines that the travel-device will be damaged or there will be over revving of the engine while shifting, the shift indicator (1) flashes and shifting can not be done.

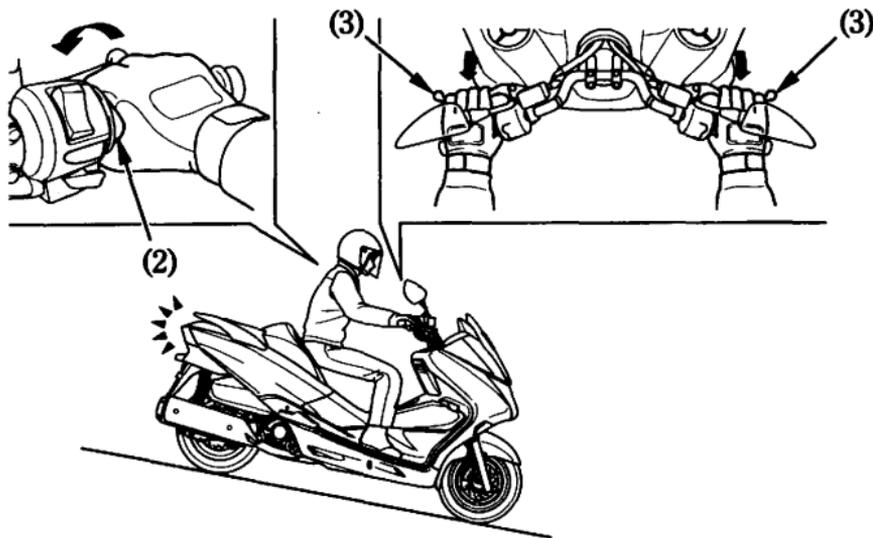
- If you have any trouble shifting or hear a noise, see your Honda dealer.
- When riding on a slippery road, shifting down may cause slip.



(1) Shift indicator

12. **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

13. 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.
2. Use the center stand to support the scooter while parked.

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

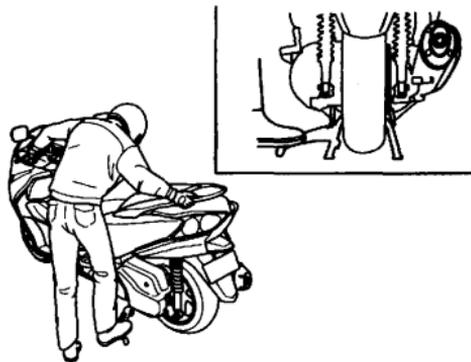
If you must park on a slight incline, aim the front of the scooter uphill to reduce the possibility of rolling off the center stand or overturning.

3. Lock the steering to help prevent theft (page 92).
4. When you leave your scooter, take the Honda smart card key with you. Make sure all the turn signals flash twice at this time.

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. 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 scooter at all times.

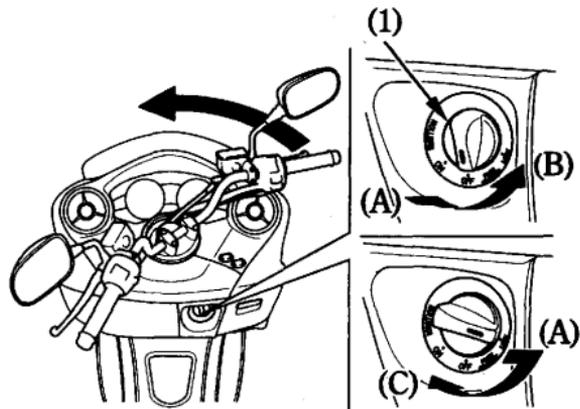
Many times stolen scooters are identified by information in the Owner's Manuals that are still with them.

NAME: _____

ADDRESS: _____

PHONE NO: _____

LOCK STEERING



(1) Ignition switch

(A) Push in

(B) Turn to LOCK

(C) Turn to OFF

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 and Honda smart card key system are 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.**

- **Be sure the rear brake lock is set before running the engine while the scooter is supported by the center stand. This will prevent the rear wheel from spinning and avoid the possibility of someone being injured from contacting the wheel.**
- **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.

MAINTENANCE SCHEDULE

Perform the Pre-ride Inspection (page 110) 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 more frequently when riding in unusually wet or dusty areas.
 - (3) Service more frequently when riding in rain or at full throttle.
 - (4) Replace every 2 years, or at indicated odometer interval, whichever comes first. Replacement requires mechanical skill.
 - (5) After every replacement, inspect 12,000 km (8,000 mi) and 18,000 km (12,000 mi), and replace 24,000 km (16,000 mi).
 - (6) 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	6	12	18	24	30	36	
			× 1,000 mi	0.6	4	8	12	16	20	24	
		MONTH		6	12	18	24	30	36		
* FUEL LINE					I		I		I	—	
* THROTTLE OPERATION					I		I		I	158	
AIR CLEANER		NOTE (2)				R			R	141	
CRANKCASE BREATHER		NOTE (3)		C	C	C	C	C	C	147	
SPARK PLUG					R		R		R	155	
* VALVE CLEARANCE							I			—	
ENGINE OIL			R	R	R	R	R	R	R	148	
ENGINE OIL FILTER			R		R		R		R	153	
RADIATOR COOLANT		NOTE (4)			I		I		R	41	
* COOLING SYSTEM					I		I		I	—	
* SECONDARY AIR SUPPLY SYSTEM					I		I		I	—	

ITEM	FREQUENCY	WHICHEVER → COMES FIRST ↓ NOTE	ODOMETER READING [NOTE (1)]								REFER TO PAGE
			× 1,000 km	1	6	12	18	24	30	36	
			× 1,000 mi	0.6	4	8	12	16	20	24	
		MONTH		6	12	18	24	30	36		
* DRIVE BELT		NOTE (5)			I	I	R		I	—	
* BELT CASE AIR CLEANER					C		C		C	142	
* FINAL DRIVE OIL		NOTE (6)								—	
BRAKE FLUID		NOTE (4)		I	I	R	I	I	R	39-40	
BRAKE PADS WEAR				I	I	I	I	I	I	162, 163	
BRAKE SYSTEM			I		I		I		I	36-40, 162, 163	
* BRAKE LIGHT SWITCH					I		I		I	—	
* BRAKE LOCK OPERATION			I	I	I	I	I	I	I	164	
* HEADLIGHT AIM					I		I		I	109	
** CLUTCH SHOES WEAR				I	I	I	I	I	I	—	
SIDE STAND					I		I		I	161	
* SUSPENSION					I		I		I	160	
* NUTS, BOLTS, FASTENERS			I		I		I		I	—	
** WHEELS/TYRES					I		I		I	—	
** STEERING HEAD BEARINGS			I		I		I		I	—	

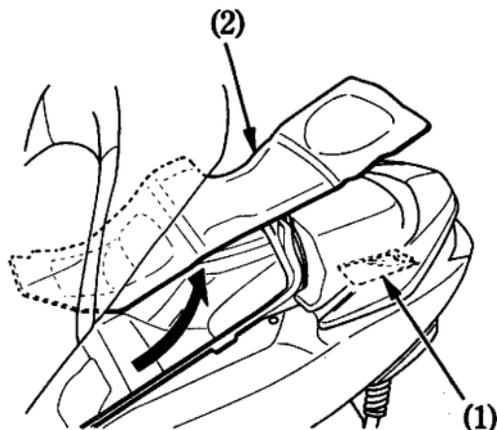
TOOL KIT

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

To access the tool kit, remove the mat.

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

- Spark plug wrench
- 10 × 12 mm Box end wrench
- 8 mm Open end wrench
- 10 × 14 mm Open end wrench
- No. 2 Phillips screwdriver
- No. 2 screwdriver
- Screwdriver handle
- Pin spanner
- Extension bar
- Tool bag



(1) Tool kit

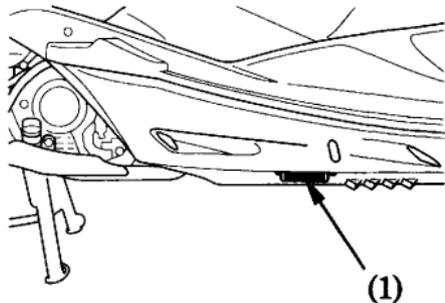
(2) Mat

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.

FRAME NO. _____

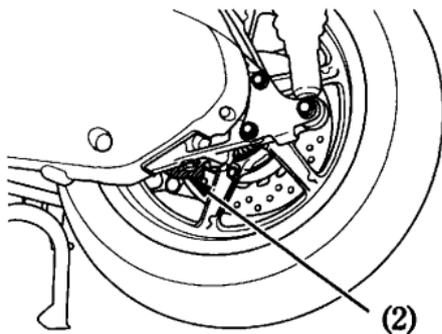


(1) Frame number

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.

ENGINE NO. _____



(2) Engine number

COLOUR LABEL

The colour label (1) is attached to the center compartment (see page 99).

It is helpful when ordering replacement parts. Record the colour and code here for your reference.

COLOUR _____

CODE _____



(1) Colour label

AIR CLEANER

Refer to the Safety Precautions on page 134.

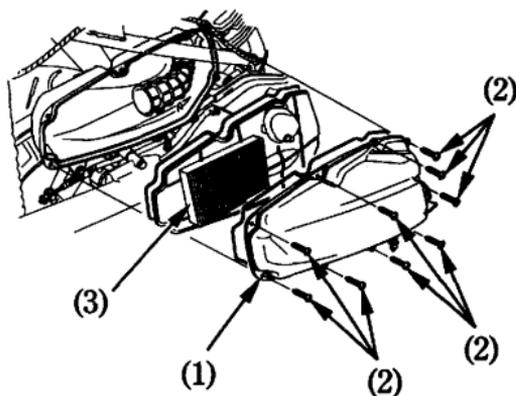
The air cleaner should be serviced at regular intervals (page 136). Service more frequently when riding in unusually wet or dusty areas.

1. Remove the rear body lower cover (page 106).
2. Remove the right floor side panel (page 107).
3. Remove the right body cover (page 108).
4. Remove the air cleaner cover (1) by removing the screws (2).
5. Remove the air cleaner (3).
6. Discard the air cleaner.

7. Install a new air cleaner.

Use the Honda Genuine air cleaner or an equivalent air cleaner specified for your model. Using the wrong Honda air cleaner or a non-Honda air cleaner which is not of equivalent quality may cause premature engine wear or performance problems.

8. Install the removed parts in the reverse order of removal.



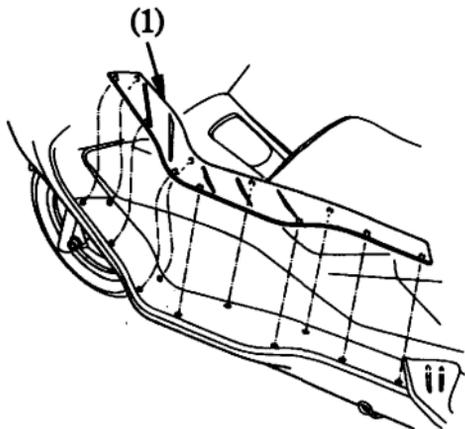
(1) Air cleaner cover
(2) Screws

(3) Air cleaner

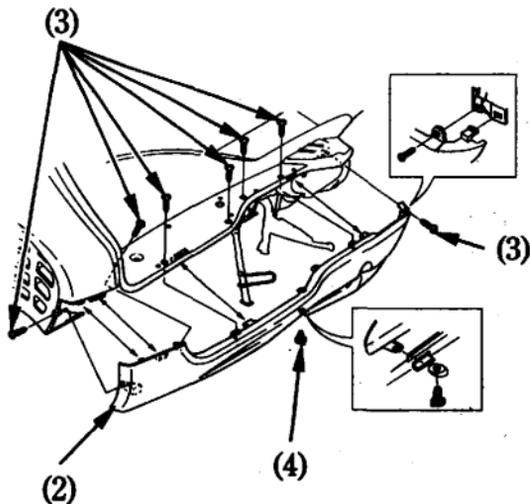
BELT CASE AIR CLEANER

Refer to the Safety Precautions on page 134.

1. Place the scooter on its center stand.
2. Remove the left floor mat (1).
3. Lower the side stand.
4. Carefully remove the left floor skirt (2) by removing the screws A (3) and clip (4) (page 145).



(1) Left floor mat



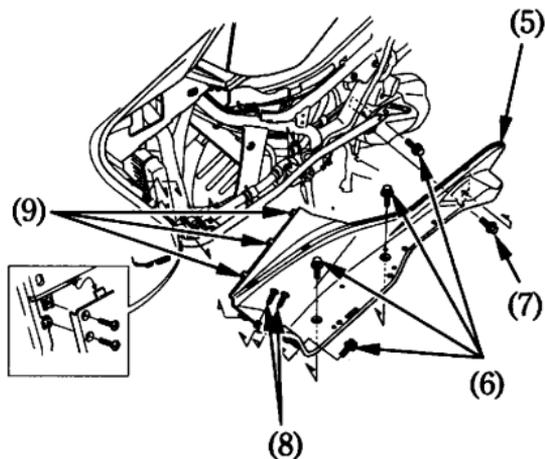
5. Remove the rear body lower cover (page 106).
6. Remove the left floor side panel (page 107).
7. Remove the left body cover (page 108).

(2) Left floor skirt

(3) Screws A

(4) Clip

8. Remove the left floor step (5) by removing the bolts A (6), bolt B (7), screws B (8) and hooks (9).

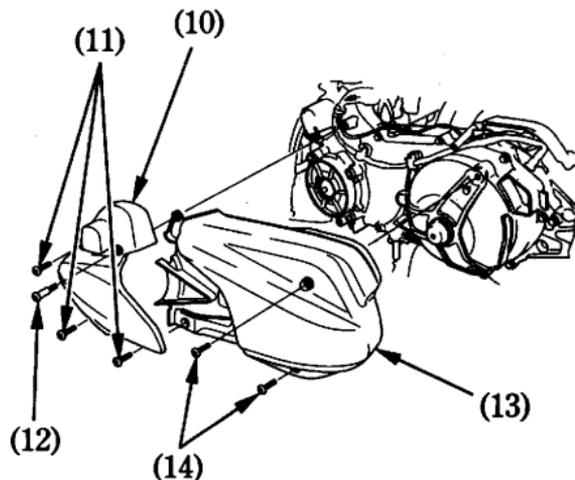


(5) Left floor step
(6) Bolts A
(7) Bolt B

(8) Screws B
(9) Hooks

9. Remove the left front side cover (10) by removing the bolts C (11) and bolt D (12).

10. Remove the left side outer cover (13) by removing the bolt E (14).



(10) Left front side
cover
(11) Bolts C

(12) Bolt D
(13) Left side outer cover
(14) Bolts E

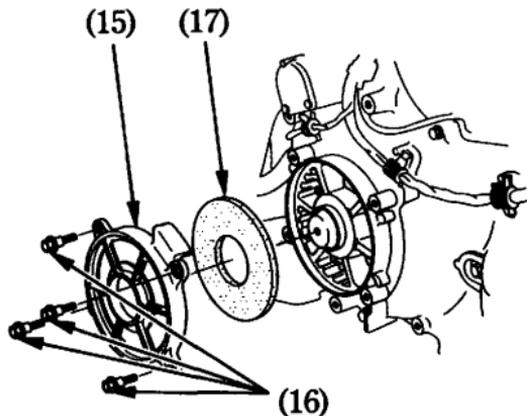
11. Remove the air cleaner element cover (15) by removing the bolts F (16).
12. Remove the air cleaner element (17).
13. Wash the air cleaner element in clean, nonflammable or high flash point solvent and let it dry thoroughly.

Never use petrol or low flash point solvents for cleaning the air cleaner. A fire or explosion could result.

Allow the air cleaner element to dry thoroughly before installation.

Do not apply oil to the air cleaner element; damage to the drive belt will occur.

14. For installation, reverse the removal procedure.

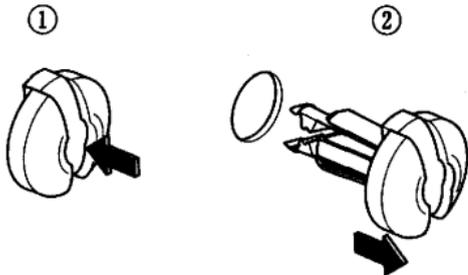


- (15) Air cleaner element cover
(16) Bolts F
(17) Air cleaner element

CLIP

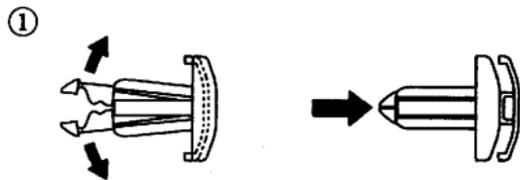
Removal:

- ① Press down on the center pin to release the lock.
- ② Pull out the clip from the hole.



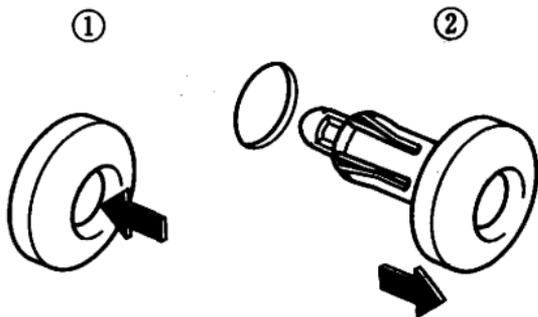
Installation:

- ① Slightly open the retaining pawls and then push them out.
- ② Insert the clip into the hole.
- ③ Lightly press down on the center pin to lock the clip.



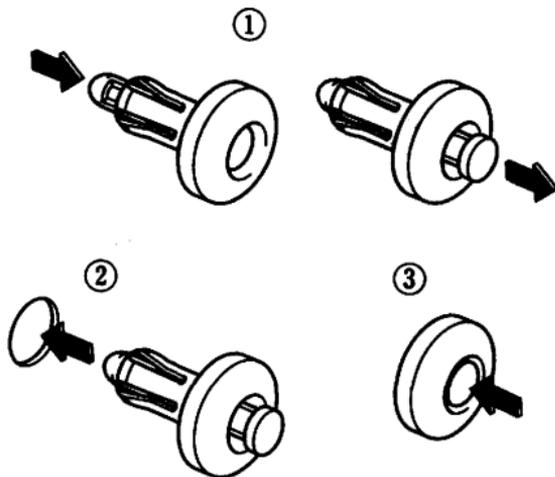
Removal:

- ① Press down on the centre pin to release the lock.
- ② Pull out the clip from the hole.



Installation:

- ① Slightly open the retaining pawls and then push them out.
- ② Insert the clip into the hole.
- ③ Lightly press down on the centre pin to lock the clip.

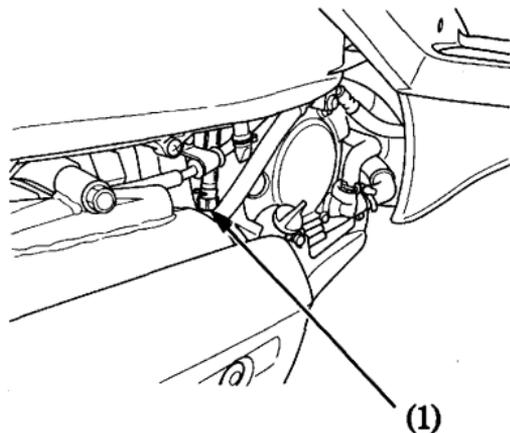


CRANKCASE BREATHER

Refer to the Safety Precautions on page 134.

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 134.

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 MOTORCYCLE OIL" or equivalent.

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

Do not use oils with graphite or molybdenum additives. They may adversely affect clutch operation.

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



NOT RECOMMENDED

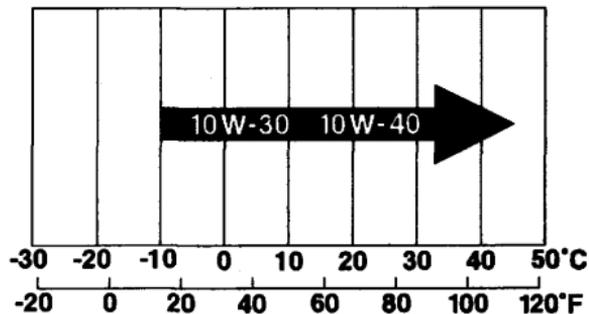


OK

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.



PRODUCT MEETING JASO T 903
COMPANY GUARANTEEING THIS MB PERFORMANCE:

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

Engine Oil

Engine oil quality is the chief factor affecting engine service life. Change the engine oil as specified in the maintenance schedule (page 136).

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.

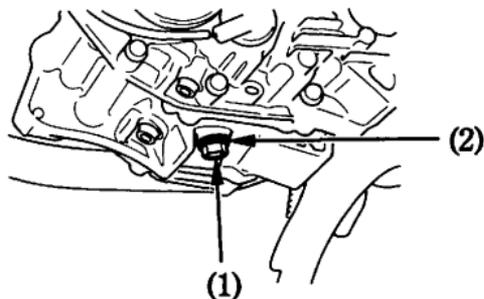
Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

Changing the oil filter requires a special oil filter tool and a torque wrench. If you do not have these tools 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.

- Place an oil drain pan under the crankcase. Remove the oil filler cap/dipstick, oil drain bolt (1) and sealing washer (2).
- Check that the sealing washer (2) on the drain bolt is in good condition and install the bolt. Replace the sealing washer every other time the oil is changed, or each time if necessary.
Oil Drain Bolt Torque:
25 N·m (2.5 kgf·m , 18 lbf·ft)
- Fill the crankcase with the recommended grade oil; approximately:
1.3 ℓ (1.4 US qt , 1.1 Imp qt)
- Reinstall the oil filler cap/dipstick.
- Start the engine and let it idle for 3–5 minutes.
- Stop the engine and wait 2–3 minutes. 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.

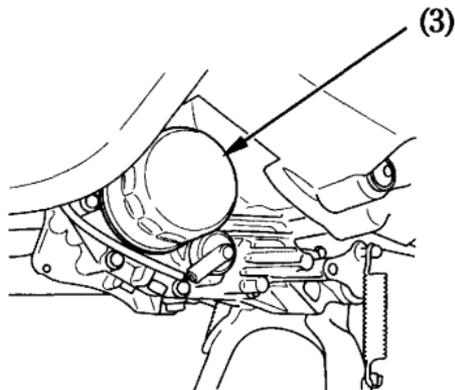


(1) Oil drain bolt

(2) Sealing washer

Engine Oil Filter

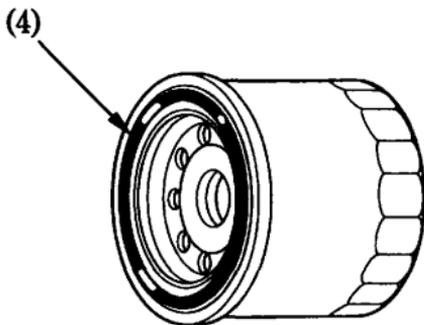
1. To drain the oil, remove the oil filler cap/dipstick and oil drain bolt and sealing washer (page 152).



(3) Oil filter

2. Remove the oil filter (3) with a filter wrench and let the remaining oil drain out. Discard the oil filter.
3. Apply a thin coat of engine oil to the new oil filter rubber seal (4).
4. Using a special tool and a torque wrench, install the new oil filter and tighten to a torque of:
26 N·m (2.7 kgf·m , 19 lbf·ft)

Use only the Honda genuine oil filter or a filter of equivalent quality specified for your model. Using the wrong Honda filter or a non-Honda filter which is not of equivalent quality may cause engine damage.



(4) Oil filter rubber seal

5. Check that the sealing washer on the drain bolt is in good condition and install the bolt. Replace the sealing washer every other time the oil is changed, or each time if necessary.

Oil drain bolt torque:

25 N·m (2.5 kgf·m , 18 lbf·ft)

6. Fill the crankcase with the recommended grade oil; approximately:

1.4 ℓ (1.5 US qt , 1.2 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 134.

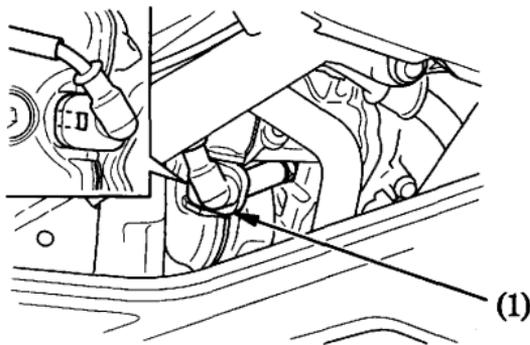
Recommended plug:

LMAR8A-9 (NGK)

NOTICE

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

1. Remove the left floor side panel (page 107).
 2. Disconnect the spark plug cap (1) from the spark plug.
 3. Clean any dirt from around the spark plug base.
- Remove the spark plug using a spark plug wrench furnished in the tool kit.

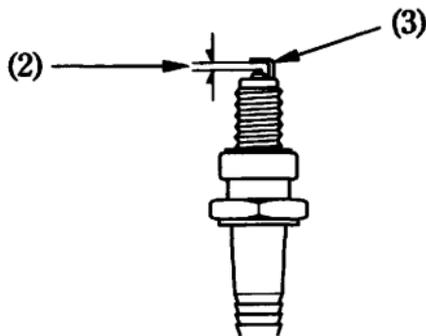


(1) Spark plug cap

4. 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.
5. Check the spark plug gap (2) using a wire-type feeler gauge. If adjustment is necessary, bend the side electrode (3) carefully.

The gap should be:

0.80 – 0.90 mm (0.031 – 0.035 in)



(2) Spark plug gap

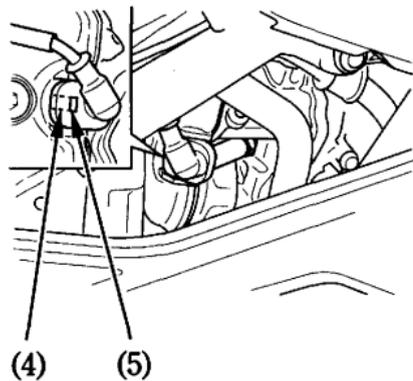
(3) Side electrode

6. Make sure the plug washer is in good condition.
7. With the plug washer attached, thread the spark plug in by hand to prevent cross-threading.
8. 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.
 - 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.

9. Reinstall the spark plug cap with the boss (4) into the hole (5).
Take care to avoid pinching any cables or wires.
10. Install the remaining parts in the reverse order of removal.



(4) Boss

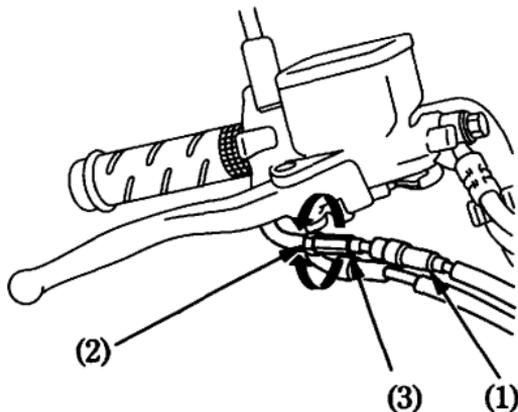
(5) Hole

THROTTLE OPERATION

Refer to the Safety Precautions on page 134.

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 – 6 mm (0.1 – 0.2 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 (3) Adjuster
(2) Lock nut

COOLANT

Refer to the Safety Precautions on page 134.

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.

FRONT AND REAR SUSPENSION INSPECTION

Refer to the Safety Precautions on page 134.

1. Check the 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. Swingarm bearings should be checked by pushing hard against the side of the rear wheel while the scooter is on the center stand. Freeplay indicates worn bearings.
3. Carefully inspect all front and rear suspension fasteners for tightness.

SIDE STAND

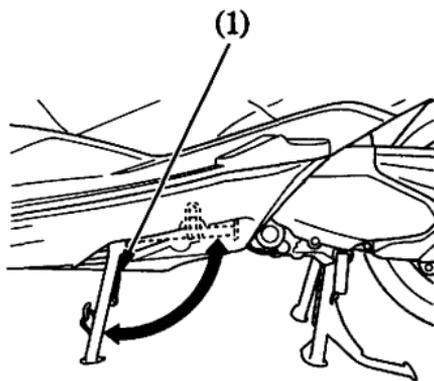
Refer to the Safety Precautions on page 134.

Perform the following maintenance in accordance with the maintenance schedule.

Functional Check:

- Check the side stand spring (1) for damage or loss of tension and the side stand assembly for freedom of movement.
- Check the side stand ignition cut-off system:
 1. Place the scooter on its center stand.
 2. Put the side stand up and start the engine.
 3. Lower the side stand. The engine should stop as you put the side stand down.

If the side stand system does not operate as described, see your Honda dealer for service.



(1) Side stand spring

BRAKE PAD WEAR

Refer to the Safety Precautions on page 134.

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.)

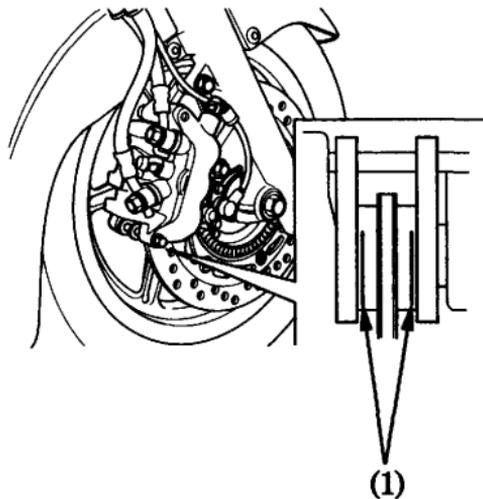
Inspect the pads at each regular maintenance interval (page 137).

Front Brake

Check the cutout (1) in each pad.

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

<FRONT BRAKE>



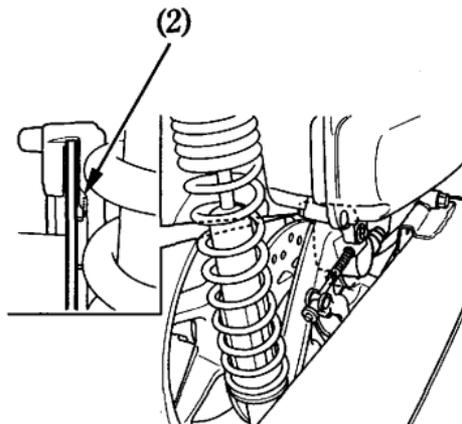
(1) Cutouts

Rear Brake

Check the cutout (2) in each pad.

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

〈 REAR BRAKE 〉



(2) Cutout

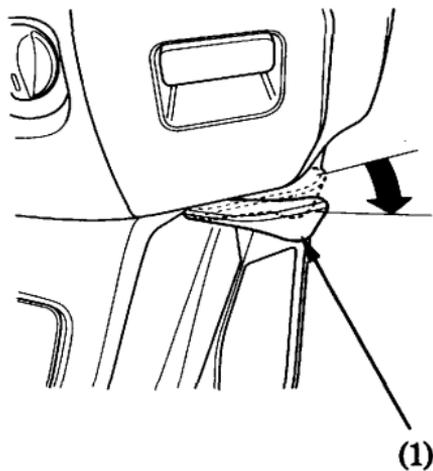
BRAKE LOCK OPERATION

Refer to the Safety Precautions on page 134.

Parking Brake Inspection:

Stop the engine and push your scooter while fully pulling the parking brake lever to check the efficacy of the parking brake.

If adjustment is necessary, have the brake adjusted by your Honda dealer for this service.



(1) Parking brake lever

BATTERY

Refer to the Safety Precautions on page 134.

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.

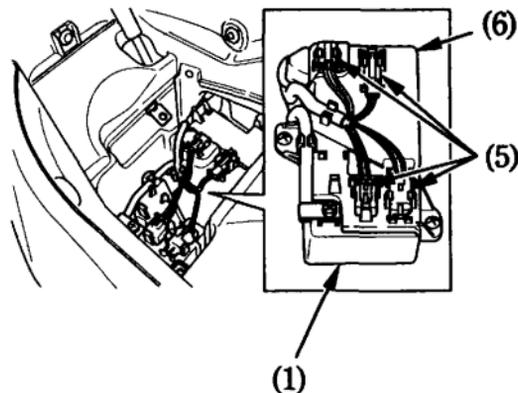
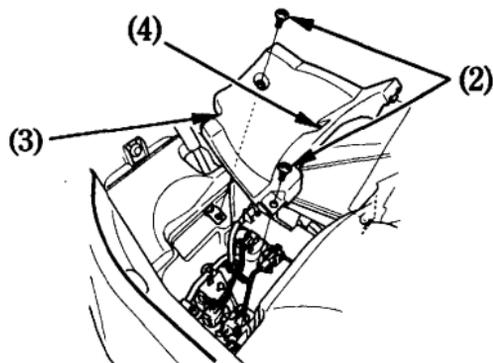
A spark or flame can cause the battery to explode with enough force to kill or seriously hurt you.

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

The battery (1) is in the battery box below the seat.

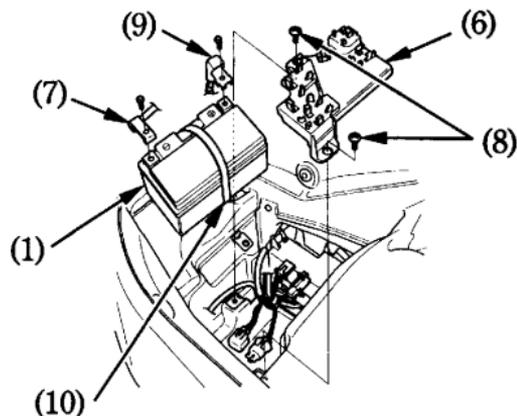
Removal:

1. Make sure the ignition switch is OFF.
2. Open the front seat (page 96) and remove the inner mat (page 138).
3. Remove the screws (2) and battery cover (3).
4. Pull up the battery cover using the hole (4).
5. Remove the couplers (5) from battery band (6).



- | | |
|-------------------|------------------|
| (1) Battery | (4) Hole |
| (2) Screws | (5) Couplers |
| (3) Battery cover | (6) Battery band |

6. Disconnect the negative (-) terminal lead (7) from the battery first.
7. Remove the screws (8) and battery band (6).
8. Disconnect the positive (+) terminal lead (9).
9. Pull out the battery from the battery box using the tape (10).



- (7) Negative (-) terminal lead
- (8) Screws
- (9) Positive (+) terminal lead
- (10) Tape

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.

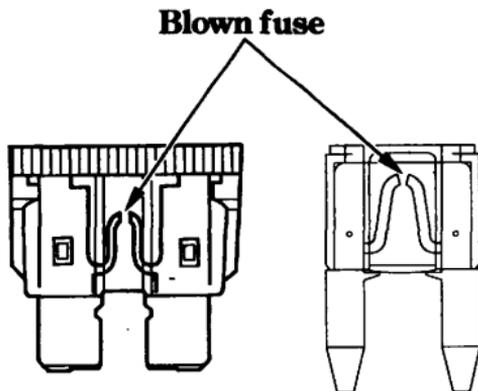
FUSE REPLACEMENT

Refer to the Safety Precautions on page 134.

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.



Fuse Box:

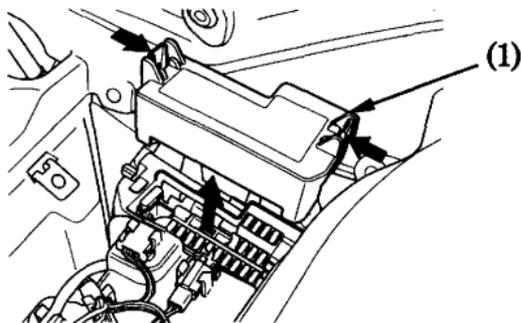
The fuse box is located under the seat.

The specified fuses are:

5 A, 10 A, 15 A, 30 A, 40 A ...NSS250S

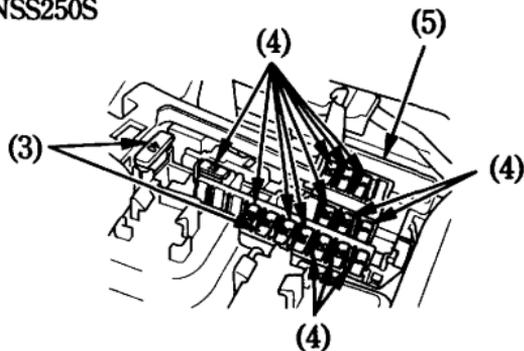
5 A, 10 A, 15 A, 30 A, 40 A ...NSS250A

1. Open the front seat (page 96) and remove the inner mat (page 138).
2. Remove the battery cover (page 166).
3. Open the fuse box cover (1).

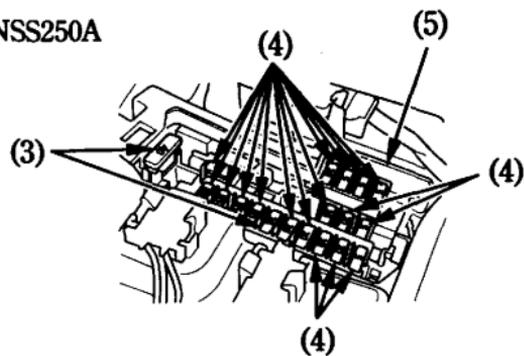


(1) Fuse box cover

NSS250S



NSS250A



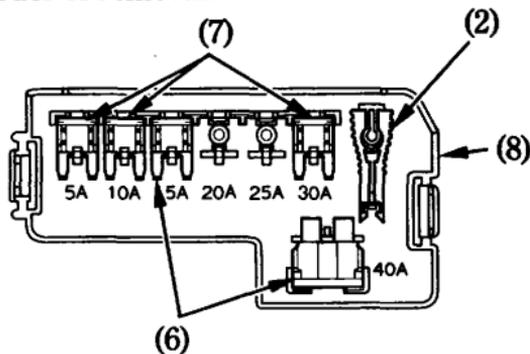
(3) Main fuses
(4) Circuit fuses

(5) Fuse box

4. Using the fuse remover (2), pull the old fuse out and install a new fuse. The main fuses (3) and circuit fuses (4) are located in the fuse box (5).

The spare main fuses (6) and spare fuses (7) are located on reverse side of the fuse box cover (8).

5. Install the remaining parts in the reverse order of removal.



(2) Fuse remover
(6) Spare main fuses

(7) Spare fuses
(8) Fuse box cover

BULB REPLACEMENT

Refer to the Safety Precautions on page 134.

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

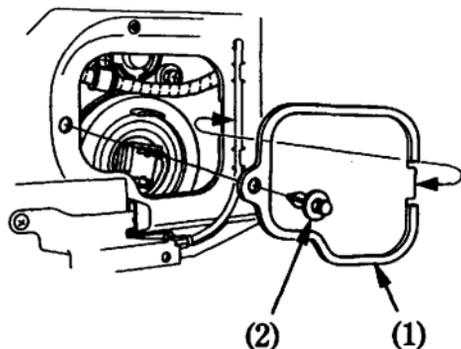
Left headlight:

- Remove the left console box (page 105).
- Remove the maintenance lid (1) by removing the clip (2) (page 146).

Right headlight:

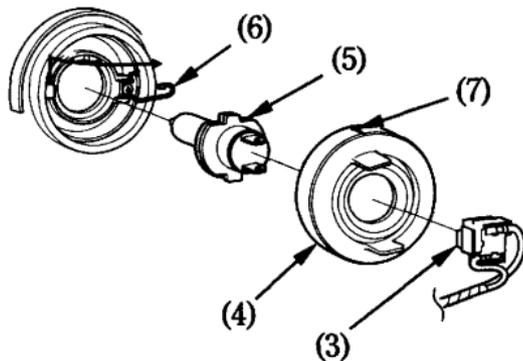
- Remove the right console box (page 103).
- Remove the maintenance lid (1) by removing the clip (2).

The right and left maintenance lids can be removed in the same manner.



- (1) Maintenance lid
- (2) Clip

1. Pull off the socket (3) without turning.
2. Remove the dust cover (4).
3. Remove the bulb (5) while pressing down on the pin (6).
4. Pull out the bulb without turning.
5. Install a new bulb in the reverse order of removal.
 - Install the dust cover with its arrow mark (7) facing up.

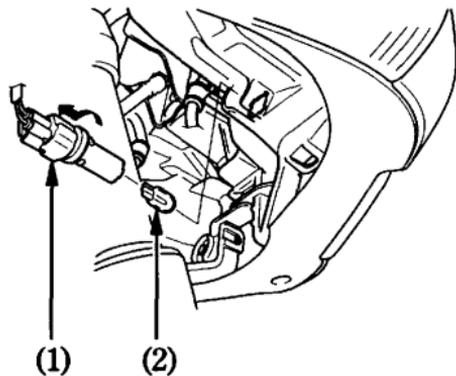


(3) Socket
(4) Dust cover
(5) Bulb

(6) Pin
(7) Arrow mark

Position Light Bulb

1. Turn the socket (1) counterclockwise, then pull it out.
2. Pull out the bulb (2) without turning.
3. Install a new bulb in the reverse order of removal.

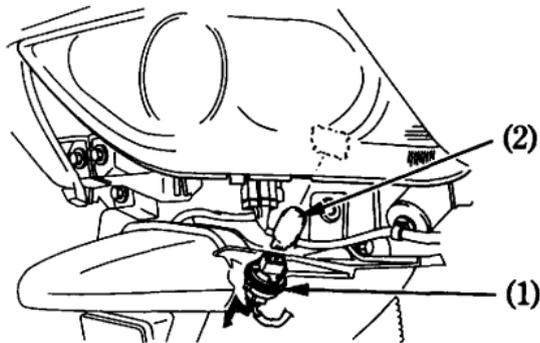


(1) Socket

(2) Bulb

Stop/Tail Light Bulb

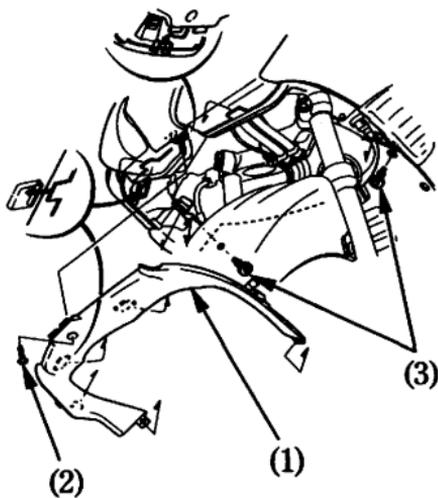
1. Remove the rear body lower cover (page 106).
2. Turn the socket (1) counterclockwise, then pull it out toward you.
3. Pull out the bulb (2) without turning.
4. Install a new bulb in the reverse order of removal.



- (1) Socket
(2) Bulb

Front Turn Signal Bulb

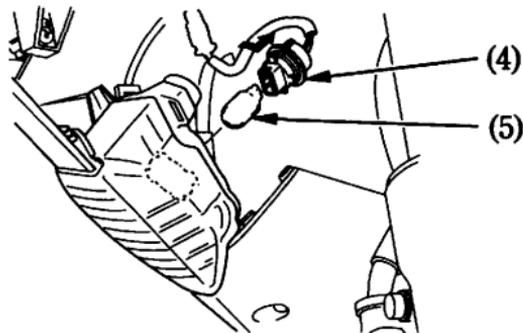
1. Remove the front lower cover (1) by removing the screw (2) and clips (3) (page 145).



- (1) Front lower cover
(2) Screw

- (3) Clips

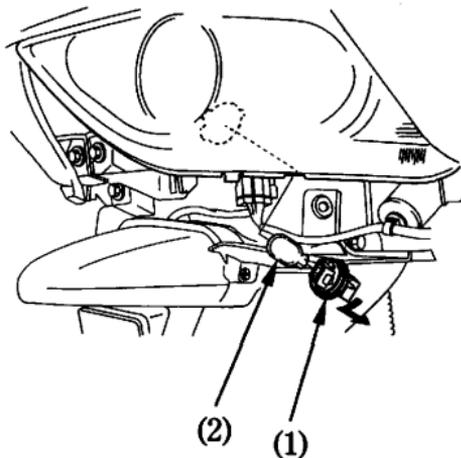
2. Remove the socket (4) turn it counterclockwise and pull out the bulb (5).
3. Install a new bulb in the reverse order of removal.



- (4) Socket
(5) Bulb

Rear Turn Signal Bulb

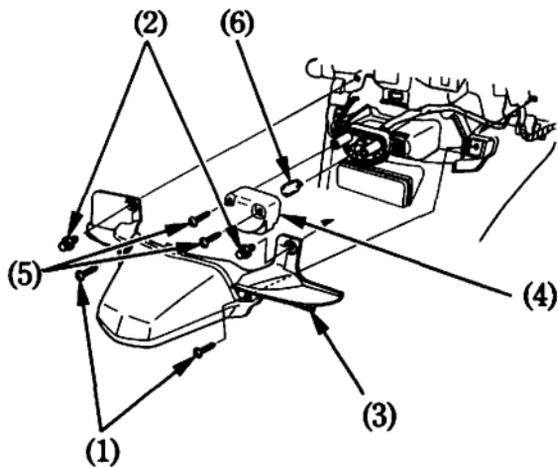
1. Remove the rear body lower cover (page 106).
2. Turn the socket (1) counterclockwise, then pull it out toward you.
3. Pull out the bulb (2) without turning.
4. Install a new bulb in the reverse order of removal.



- (1) Socket
(2) Bulb

License Light Bulb

1. Remove the rear body lower cover (page 106).
2. Remove the screws A (1), clips (2) (page 146) and license light cover (3).
3. Remove the license light lens (4) by removing the screws B (5).
4. Pull out the bulb (6) without turning.
5. Install a new bulb in the reverse order of removal.



- | | |
|-------------------------|------------------------|
| (1) Screws A | (4) License light lens |
| (2) Clips | (5) Screws B |
| (3) License light cover | (6) 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.

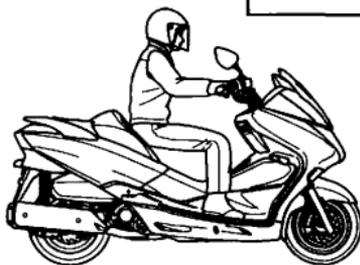
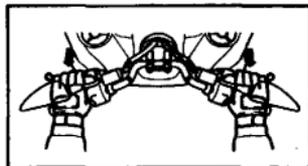
4. After cleaning, rinse the scooter thoroughly with plenty of clean water. Strong detergent residue can corrode alloy parts.
5. Dry the scooter, start the engine and let it run for several minutes.



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

Road Salt used on roads during winter and salt from seawater causes rust. Wash your scooter as follows after it has run through salty water or on roads treated with Road Salt.

1. Clean the scooter using cool water (page 179).

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.

Exhaust Pipe Maintenance

The exhaust pipe is stainless steel but may become stained by oil or mud. If necessary, remove heat stains with a liquid kitchen abrasive.

Clean the Windscreen

Using plenty of water, clean the windscreen with a soft cloth or sponge. (Avoid using detergents or any kind of chemical cleaner on the windscreen.) Dry with a soft, clean cloth.

NOTICE

To avoid possible scratching or other damage, use only water and a soft cloth or sponge to clean the windscreen.

For a dirtier windscreen, use a diluted neutral detergent with a sponge and plenty of water. Make sure to wash off all the detergent. (Detergent residue may cause windscreen cracks.)

Replace the windscreen if scratches cannot be removed and they obstruct clear vision.

Do not let battery electrolyte, brake fluid or other acid chemicals get on the windscreen and screen garnish. They will damage the plastic.

Clean the Seat

Due to the top coat design, the seat surface tends to catch and trap dirt or dust in its texture.

Using plenty of water, clean the seat with a sponge and mild detergent.

After washing, dry with a soft, 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, such as for winter, 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 and filter.
2. Make sure the cooling system is filled with a 50/50 % antifreeze solution.
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 110).
Test ride the scooter at low speeds in a safe riding area away from traffic.

SPECIFICATIONS

DIMENSIONS

Overall length	2,185 mm (86.0 in)
Overall width	750 mm (29.5 in)
Overall height	1,180 mm (46.5 in)
Wheelbase	1,545 mm (60.8 in)

CAPACITIES

Engine oil	After draining	1.3 ℓ (1.4 US qt , 1.1 Imp qt)
	After draining and oil filter change	1.4 ℓ (1.5 US qt , 1.2 Imp qt)
	After disassembly	1.7 ℓ (1.8 US qt , 1.5 Imp qt)
Transmission oil	After draining	0.28 ℓ (0.30 US qt , 0.25 Imp qt)
	After disassembly	0.30 ℓ (0.32 US qt , 0.26 Imp qt)
Fuel tank		12.0 ℓ (3.17 US gal , 2.64 Imp gal)
Cooling system capacity		2.04 ℓ (2.16 US qt , 1.79 Imp qt)
Passenger capacity		Operator and one passenger
Maximum weight capacity		180 kg (397 lbs)

ENGINE

Bore and stroke	68.0 × 68.5 mm (2.68 × 2.70 in)
Compression ratio	10.2 : 1
Displacement	249 cm³ (15.2 cu-in)
Spark plug	
Standard	LMAR8A-9 (NGK)
Idle speed	1,500 ± 100 min⁻¹ (rpm)
Valve clearance (Cold)	
Intake	0.16 mm (0.006 in)
Exhaust	0.22 mm (0.009 in)

CHASSIS AND SUSPENSION

Caster

27°00'

Trail

92 mm (3.6 in)

Tyre size, front

110/90-13M/C 55P

BRIDGESTONE

HOOP B03 E

DUNLOP

SX01F JC

Tyre size, rear

140/70-13M/C 61P

BRIDGESTONE

HOOP B02 E

DUNLOP

SX01

Tyre type

bias-ply, tubeless

POWER TRANSMISSION

Primary reduction

V-Belt

Final reduction

7.537

ELECTRICAL

Battery

12V – 11(10)Ah

Generator

0.47kW / 5,000 min⁻¹ (rpm)

LIGHTS

Headlight

12V – 55W × 2

Stop/tail light

12V – 21/5W × 2

Turn signal light

Front

12V – 21/5W × 2

Rear

12V – 21W × 2

Position light

12V – 5W × 2

License light

12V – 5W

Trunk light

12V – 5W...NSS250A

FUSE

Main fuse A

40 A

Main fuse B

15 A

Other fuses

5 A, 10 A, 15 A, 30 A

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.

