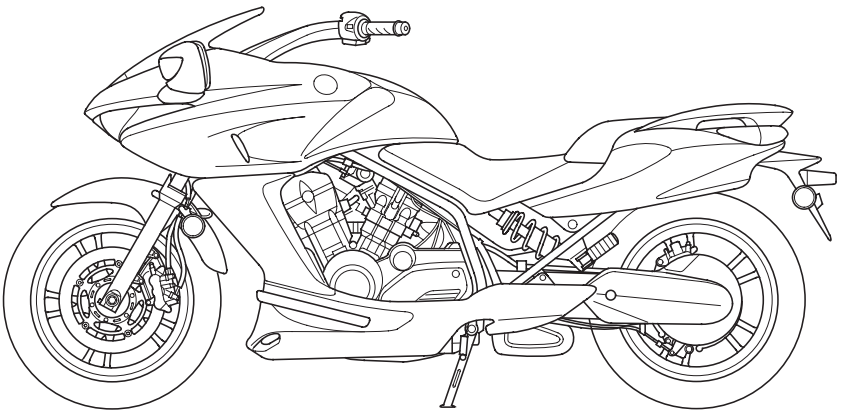
Contents

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

Contents

2009
Honda NSA700A
OWNER'S MANUAL



Introduction

Congratulations on choosing your Honda motorcycle.

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

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

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

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

Read the Warranties Booklet (page 251) thoroughly so you understand the coverages that protect your new Honda and are aware of your rights and responsibilities.

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

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

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

Happy riding!

California Proposition 65 Warning

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

A Few Words About Safety

Your safety, and the safety of others, is very important. And operating this motorcycle 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 motorcycle. You must use your own good judgment.

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

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

These signal words mean:

Safety Messages

⚠ 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 Motorcycle Safety.
- **Instructions** — how to use this motorcycle correctly and safely.

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

Motorcycle Safety

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

Important Safety Information

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

There is much that you can do to protect yourself when you ride. You'll find many helpful recommendations throughout this manual. The following are a few that we consider 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 54).

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

Because many accidents involve inexperienced or untrained riders, we urge all riders to take a certified course approved by the Motorcycle Safety Foundation (MSF). See page 56 .

Ride Defensively
The most frequent motorcycle collision happens when a car turns left in front of a motorcycle. Another common situation is a car moving suddenly into your lane.

Always pay attention to other vehicles around you, and do not assume that other drivers see you. Be prepared to stop quickly or make an evasive maneuver. For other riding tips, see the booklet, *You and Your Motorcycle Riding Tips,* which came with your new motorcycle (USA only).

Make Yourself Easy to See
Some drivers do not see motorcycles 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 limits is another major cause of motorcycle accidents. Never ride beyond your personal abilities or faster than conditions warrant. Remember that alcohol, drugs, fatigue, and inattention can significantly reduce your ability to make good judgments and ride safely.

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

Keep Your Honda in Safe Condition
It's important to keep your motorcycle properly maintained and in safe riding condition. To help avoid problems, inspect your motorcycle before every ride and perform all recommended maintenance. Never exceed load limits (page 61), and do not modify your motorcycle (page 6) or install accessories that would make your motorcycle unsafe (page 5).

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

⚠ WARNING

Improper 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 motorcycle. Because Honda cannot test all other accessories, you must be personally responsible for proper selection, installation, and use of non-Honda accessories.

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

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

- Do not add any electrical equipment that will exceed the motorcycle's electrical system capacity (page 234). A blown fuse can cause a loss of lights or engine power (page 216).
- Do not pull a trailer or sidecar with your motorcycle. This motorcycle was not designed for these attachments, and their use can seriously impair your motorcycle's handling.

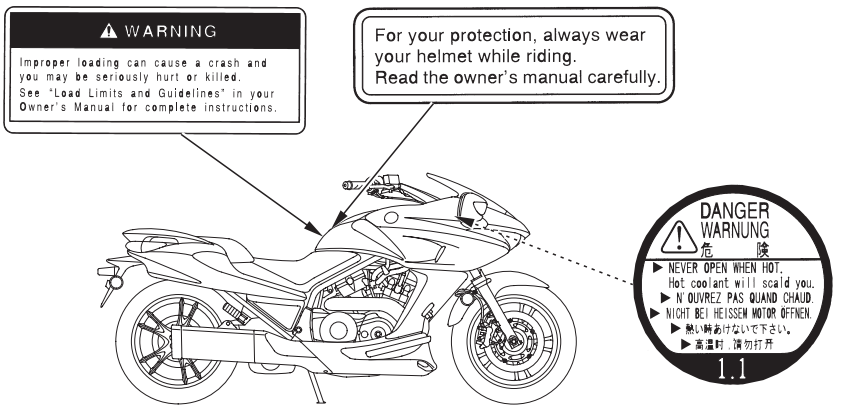
Modifications

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

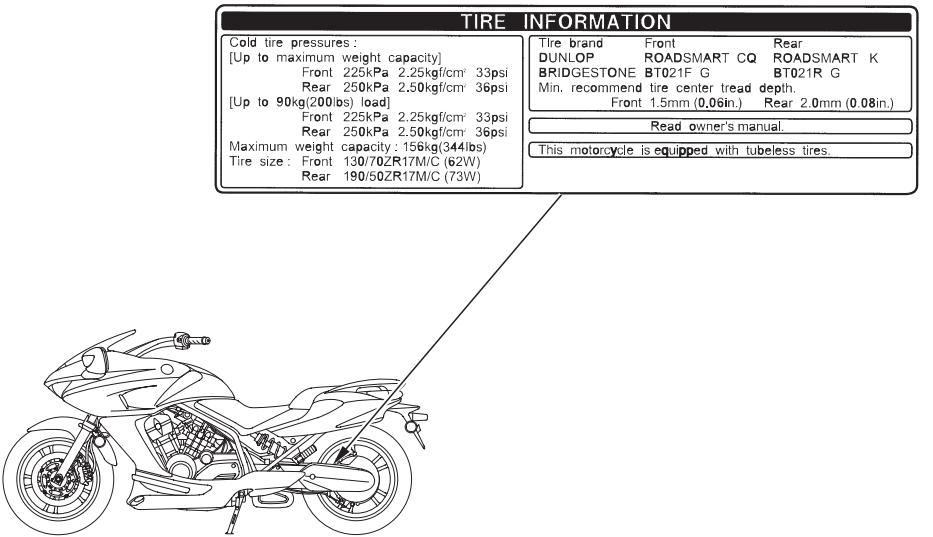
Removing or modifying your lights, exhaust system, emission control system, or other equipment can also make your motorcycle illegal.

Safety labels on your motorcycle either warn you of potential hazards that could cause serious injury or they provide important safety information. Read these labels carefully and don't remove them.

If a label comes off or becomes hard to read, contact your Honda dealer for a replacement.



Safety Labels

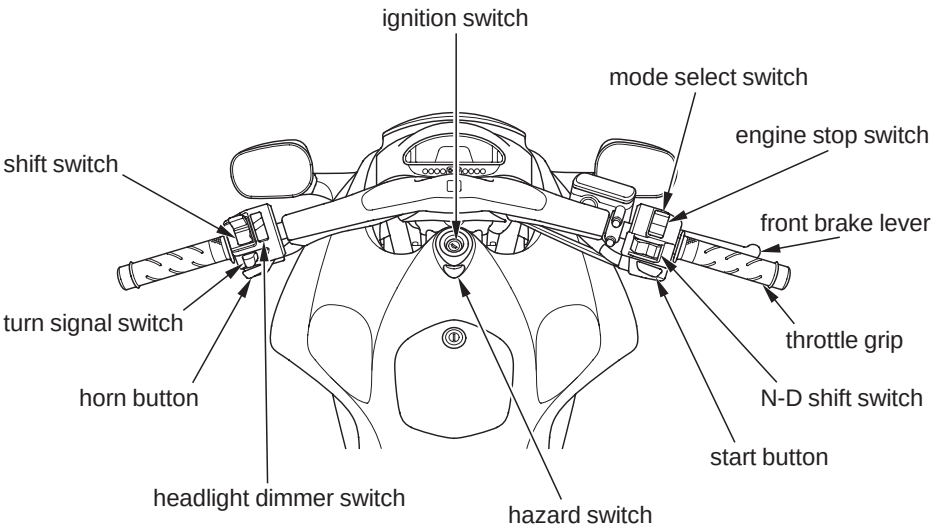


This section shows the location of all gauge, indicators, and controls you would normally use before or while riding your motorcycle.

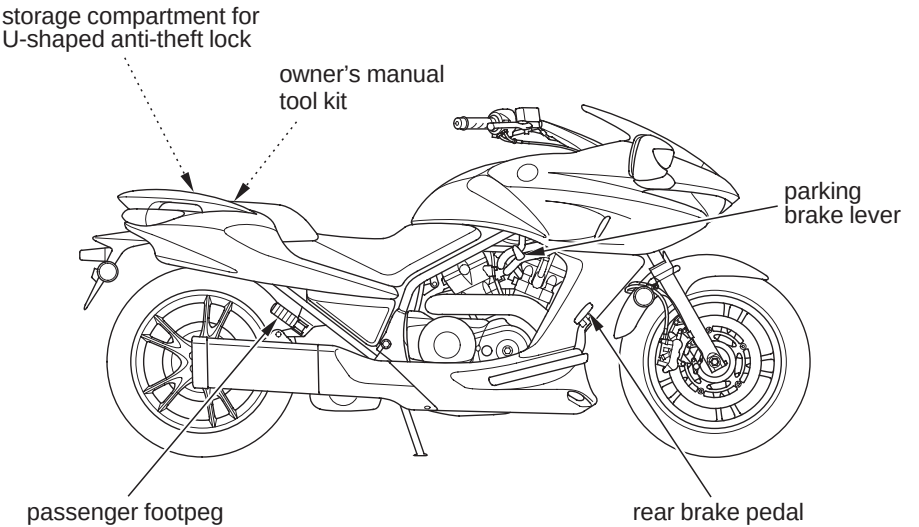
The items listed on this page are described in this section. Instructions for other components are presented in other sections of this manual where they will be most useful.

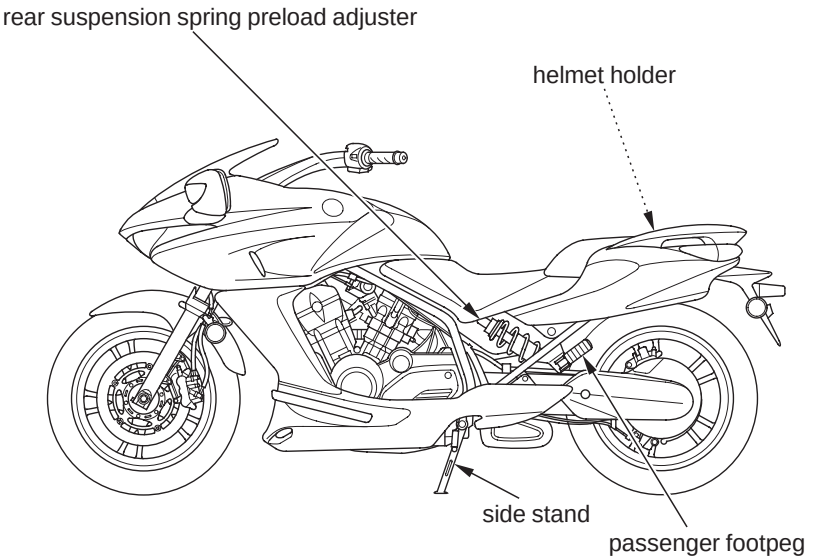
(cont'd)

Instruments & Controls


ignition switch
mode select switch
engine stop switch
shift switch
front brake lever
turn signal switch
throttle grip
horn button
N-D shift switch
start button
headlight dimmer switch
hazard switch

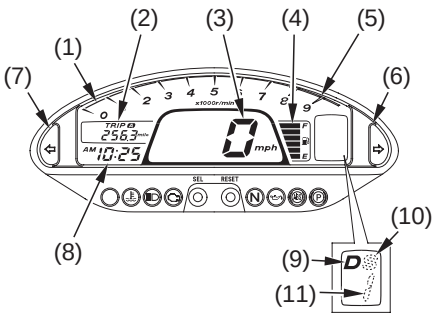
Operation Component Locations



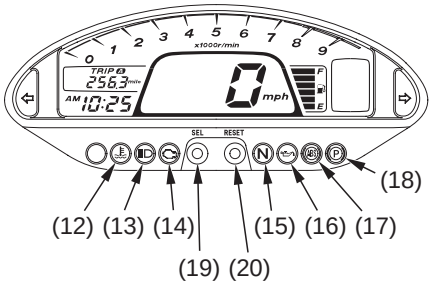

rear suspension spring preload adjuster
helmet holder
side stand
passenger footpeg

Gauge, Indicators & Displays

The gauge, indicators and displays on your motorcycle keep you informed, alert you to possible problems, and make your riding safer and more enjoyable. Refer to the gauge, indicators and displays frequently. Their functions are described on the following pages.



(1) tachometer
(2) odometer/tripmeter display
(3) speedometer
(4) fuel gauge
(5) tachometer red zone
(6) right turn signal indicator
(7) left turn signal indicator
(8) digital clock
(9) D mode indicator
(10) S mode indicator
(11) gear position indicator



(12) high coolant temperature indicator
(13) high beam indicator
(14) PGM-FI malfunction indicator lamp (MIL)
(15) neutral indicator
(16) low oil level/pressure indicator
(17) Anti-Lock Brake System indicator (ABS)
(18) parking brake indicator
(19) SEL button
(20) RESET button

Lamp Check

The low oil level/pressure indicator comes on when you turn the ignition switch ON so you can check that it is working. The indicator remains on until after the engine is started.

The high coolant temperature indicator lights for a few seconds and then goes off when you turn the ignition switch ON.

The PGM-FI malfunction indicator lamp (MIL) lights for a few seconds and then goes off when you turn the ignition switch ON and engine stop switch is at RUN.

The anti-lock brake system (ABS) indicator comes on when you turn the ignition switch ON. This indicator goes off after you ride the motorcycle at a speed above 6 mph (10 km/h).

When applicable, the high beam, neutral and parking brake indicators come on when you turn the ignition switch ON and remain on until each function is cancelled.

These indicators are identified in the table on pages 18 – 22 with the words: *Lamp Check.*

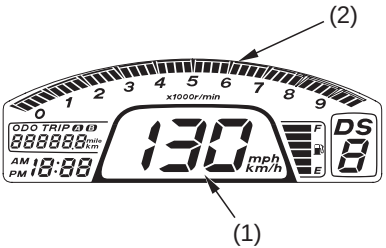
If one of these indicators does not come on when it should, have your Honda dealer check for problems.

Display Check

When the ignition switch is turned ON, the display will temporarily show all the modes and digital segments. Thereafter, the speedometer (1) will show from 130 mph to 0 mph (from 200 km/h to 0 km/h in km/h) and the tachometer (2) will sweep to red zone again and go off so that you can make sure the liquid crystal display is functioning properly.

The displays are identified in the table on pages 18 — 19 with the words: *Display Check.*

If any part of these displays does not come on when it should, have your Honda dealer check for problems.



(1) speedometer
(2) tachometer

Gauge, Indicators & Displays

1	tachometer		Shows engine speed in revolutions per minute (rpm). *Display Check.*
2	odometer/tripmeter display		The display includes the following functions: *Display Check.*
		odometer	Shows the total miles or kilometers ridden (page 26).
		tripmeter A & B	Shows the number of miles or kilometers ridden since you last reset the meter. The tripmeter has two sub modes, ‘‘A’’ and ‘‘B.’’ To zero (0) the tripmeter, push and hold the RESET button (page 26).
3	speedometer		Shows riding speed in miles or kilometers per hour (page 25). *Display Check.*
4	fuel gauge		Shows approximate fuel supply available (page 23). *Display Check.*
5	tachometer red zone		Shows excessive engine rpm range (indicated from the beginning of the tachometer red zone) in which operation may damage the engine. Do not let the tachometer rpm display enter the red zone.

6	right turn signal indicator (green)	Flashes when the right turn signal operates.
7	left turn signal indicator (green)	Flashes when the left turn signal operates.
8	digital clock	Shows hour and minute (page 28). *Display Check.* If the engine oil level can not be detected for long periods, the digital clock will change to the OIL-check display (page 31).
9	D mode indicator	Comes on when the transmission is switched from neutral to the D mode (page 46). Comes on when the D mode is selected in the automatic shift mode (page 50). *Display Check.*
10	S mode indicator	Comes on when the S mode is selected in the automatic shift mode (page 48). *Display Check.*
11	gear position indicator	Shows the gear position when the 6-speed manual mode is selected (page 51). *Display Check.*

12	high coolant temperature indicator (red)	Lights when the coolant is over the specified temperature. If the indicator comes on, pull safely to the side of the road. See pages 212 – 213 for instructions and cautions. *Lamp Check.*
13	high beam indicator (blue)	Lights when the headlight is on high beam.
14	PGM-FI malfunction indicator lamp (MIL) (amber)	Lights when there is any abnormality in the PGM-FI (Programmed Fuel Injection) system. Should also light for a few seconds and then go off when the ignition switch is turned ON and the engine stop switch is at RUN. If the indicator comes on at any other time, reduce speed and take your motorcycle to a Honda dealer as soon as possible. *Lamp Check.*
15	neutral indicator (green)	Lights when the transmission is in neutral. *Lamp Check.*

16	low oil level/pressure indicator (red)	This indicator has two lighting patterns. • Lights when engine oil pressure is low enough to cause engine damage. • Flashes when engine oil level is less than specified capacity. If the low oil level/pressure indicator lights or flashes during operation, pull safely to the side of the road. See pages 214 — 215 for instructions and cautions. *Lamp Check*.

17	anti-lock brake system (ABS) indicator (amber)	Lights when there is any abnormality in the anti-lock brake system (ABS). Normally, this indicator comes on when the ignition switch is turned ON, and goes off after you ride the motorcycle at a speed above 6 mph (10 km/h). If the indicator comes on while riding, stop the motorcycle in a safe place and turn off the engine. Refer to *ABS Indicator*, page 80 . For information about ABS, see page 79 . *Lamp Check.*
18	parking brake indicator (red)	Lights as a reminder that you have not released the parking brake lever.
19	SEL button	Selects the odometer, tripmeter A and tripmeter B (page 26). Also used to set the digital clock (pages 28 – 30).
20	RESET button	Resets the tripmeter to zero (0) (page 26). Changes the speed and mileage units for the speedometer/odometer/tripmeter (page 27). Also used to set the digital clock (pages 28 – 30).

Fuel Gauge

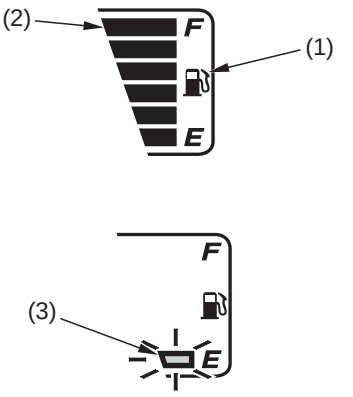
The fuel gauge liquid crystal display (1) shows the approximate fuel supply available in a graduated display. When segment F (2) goes on, the fuel tank capacity is:

3.96 US gal (15.0 ℓ)

When segment E (3) flashes, you should refill the tank as soon as possible.

The amount of fuel remaining when the flashing starts is approximately:

0.79 US gal (3.0 ℓ)



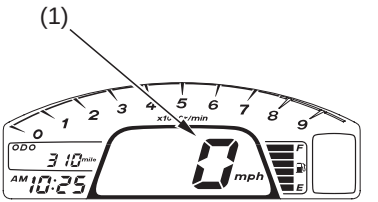
(1) fuel gauge liquid crystal display
(2) segment F
(3) segment E

Fuel Gauge Failure Indication

When the fuel system has an error, all segments will blink. If this occurs, see your Honda dealer as soon as possible.

Speedometer

The speedometer (1) shows riding speed in miles or kilometers per hour.



(1) speedometer

Odometer/Tripmeter A & B

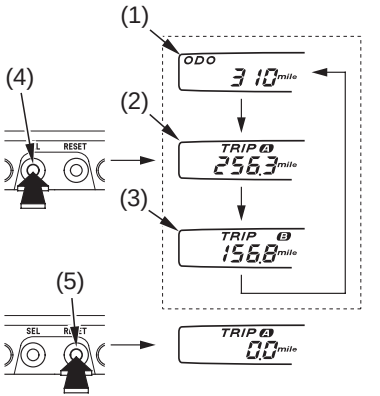
The odometer (1) shows the total miles or kilometers ridden.

The tripmeter A (2) and tripmeter B (3) show number of miles or kilometers ridden since you last reset the meter.

To select the odometer, tripmeter A or tripmeter B, push the SEL button (4).

To reset the tripmeter, push and hold the RESET button (5) for more than 2 seconds when the display is in the tripmeter A or tripmeter B.

The tripmeter will reset if the battery is disconnected.

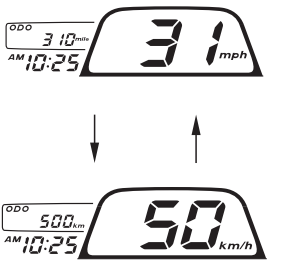


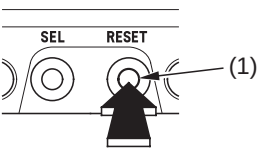
(1) odometer
(2) tripmeter A
(3) tripmeter B
(4) SEL button
(5) RESET button

Changing the Speed and Mileage Unit

The speedometer displays ‘‘mph’’ or ‘‘km/h.’’
The odometer/tripmeter displays ‘‘mile’’ or ‘‘km.’’

To select ‘‘mph’’/‘‘mile’’ and ‘‘km/h’’/ ‘‘km,’’ push and hold the RESET button (1) for more than 2 seconds with the display in the odometer mode.





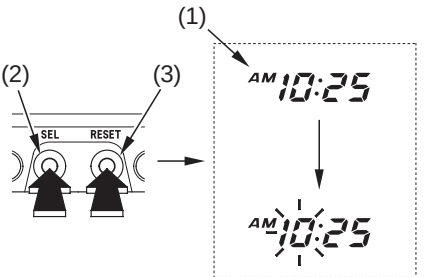
(1) RESET button

Digital Clock

Shows hour and minute.

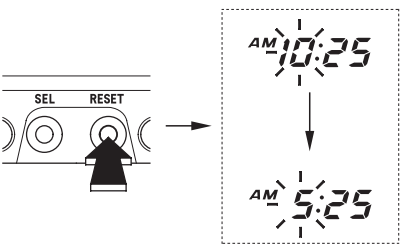
This motorcycle is able to detect the engine oil level. If the system can not read the engine oil level for long periods, the digital clock (1) will change to the OIL-check display (page 31).

To adjust the time, proceed as follows:
1. Turn the ignition switch ON.
2. Push and hold both the SEL 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.

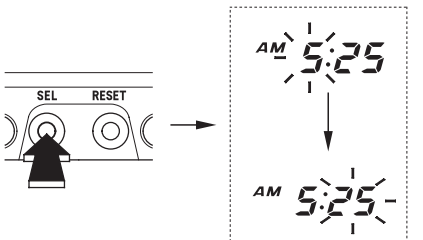


(1) digital clock
(2) SEL button
(3) RESET button

3. To set the hour, push 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 — push and hold the RESET button until the desired hour and AM/PM appear.

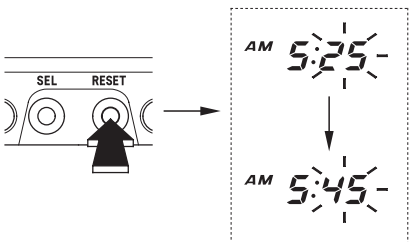


4. Push the SEL button. The minute display will start flashing.



(cont'd)

5. To set the minute, push the RESET button until the desired minute is displayed. The minute display will return to ‘‘00’’ when ‘‘60’’ is reached without affecting the hour display.
   - The time advances by one minute, each time the button is pushed.
   - Quick setting—push and hold the RESET button until the desired minute appears.



6. To end the adjustment, push the SEL button or turn the ignition switch OFF. The display will stop flashing automatically and the adjustment will be cancelled if the button is not pushed for about 2 minutes.

The clock will display 1:00 if the battery is reconnected.

OIL-Check Display

If the ignition switch is turned ON while the motorcycle is on a slope, and it is tilted up or down to the front, back, or either side, the engine oil level may not be accurately detected. This also applies when the side stand is down and the ignition switch is ON.

Before you turn the ignition switch ON, make sure you place your motorcycle in an upright position on a level surface and put the side stand up.

If you keep riding your motorcycle for more than 1,553 miles (2,500 km) in the condition where the engine oil level cannot be detected properly, the digital clock changes to the blinking ‘‘OIL’’ (1) display.

If this happens, park in a safe place, turn OFF the ignition switch, and check the engine oil level immediately (page 129). If the engine oil level is low, add engine oil (page 126). Then reset the OIL-check display (page 32).

(1) “OIL”

(cont’d)

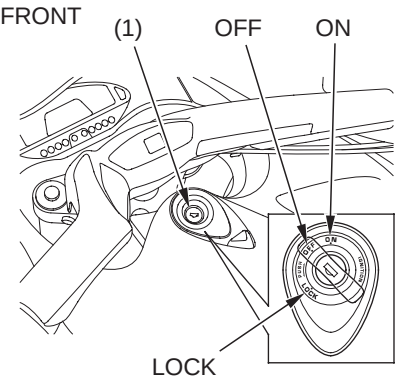
To reset the OIL-check display, proceed as follows:
After 4－5 minutes from stopping the engine, put the side stand up with the motorcycle upright on a firm, level surface, and turn the ignition switch ON. Make sure that the digital clock is displayed.

If the OIL-check display does not return to the digital clock, contact your Honda dealer immediately.

Ignition Switch

The ignition switch (1) is used for starting and stopping the engine (page 65) and to lock the steering for theft prevention (page 84). Insert the key and turn it to the right for the ON position. Push down on the key and turn it to the left to the LOCK (steering lock) position.

Key Position	Function
ON	Electrical circuits on.
OFF	No electrical circuits function.
LOCK (steering lock)	No electrical circuits function. Locks the steering head.



(1) ignition switch

To unlock the steering lock, insert and push down on the key and turn it to the right to the OFF position.

Start Button

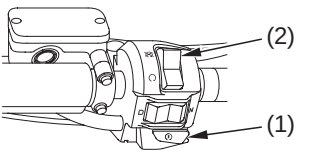
The start button (1) is used for starting the engine. Pushing the button in starts the engine. See *Starting Procedure,* page 66 .

When the start button is pushed, the starter motor will crank the engine; the headlight will automatically go out, but the taillight and license light will stay on.

The engine will not operate if the engine stop switch is in the OFF position when the start button is pushed.

Engine Stop Switch

RIGHT HANDLEBAR



(1) start button
(2) engine stop switch

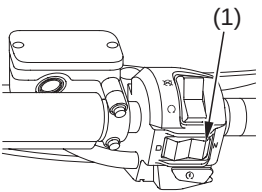
OFF
RUN

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

If your motorcycle is stopped with the ignition switch ON and the engine stop switch OFF (⊠), the headlight, taillight and license light will remain on, resulting in battery discharge.

N-D Shift Switch

The N-D shift switch (1) is below the engine stop switch.
The switch has two positions: neutral (N) and drive (D).
See pages 44 − 47 for operation of the switch to ride your motorcycle.

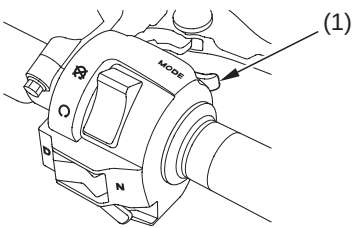


(1) N-D shift switch

Mode Select Switch

To shift between the automatic shift mode and 6-speed manual mode, press the mode select switch (1).

RIGHT HANDLEBAR



(1) mode select switch

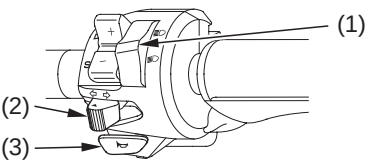
Headlight Dimmer Switch

The headlight dimmer switch (1) is used to change between the high and low beams of the headlight. To operate, turn the switch to HI for high beam, LO for low beam.

Turn Signal Switch

The turn signal switch (2) is used to signal a turn or a lane change. To operate, move the switch all the way in the proper direction and release it. The appropriate turn signal lights will start blinking. To cancel the light, push the switch in.

LEFT HANDLEBAR



(1) headlight dimmer switch HI
(2) turn signal switch LO
(3) horn button

Horn Button

The horn is used to alert other motorists. To operate, push the horn button (3).

RESET Button

The RESET button is used to reset (zero) the tripmeter. To reset the tripmeter, push and hold the button for more than 2 seconds (page 26).

The RESET button is used to change the speed and mileage units for the speedometer/odometer/tripmeter (page 26).

The RESET button is also used to set the digital clock (page 28). (cont'd)

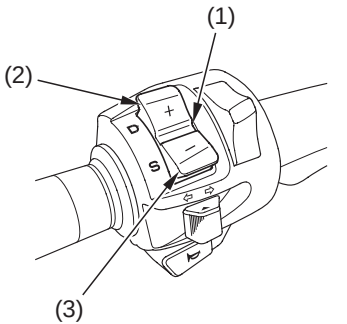
SEL Button

The SEL button is used to select odometer, tripmeter A or tripmeter B. To select from one tripmeter to the other, push the button (page 26).

The SEL button is also used to set the digital clock (page 28).

Shift Switch

LEFT HANDLEBAR



(1) shift switch
(2) shift switch (+)
(3) shift switch (−)

When the Automatic Shift Mode is selected
Press the shift switch (1) to select the D mode or S mode.

When the 6-speed Manual Mode is selected
Press the shift switch to shift the gear between 1st and 6th.

Shift switch (+) (2):
- Automatic shift mode: select the D mode.
- 6-speed manual mode: shift up.

Shift switch (−) (3):
- Automatic shift mode: select the S mode.
- 6-speed manual mode: shift down.

Parking Brake Lock

Be sure the parking brake is applied while starting and warming up the engine.
The parking brake lock will not function if the parking brake is not adjusted properly (page 161).

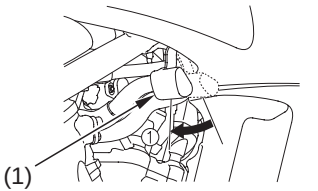
To Apply the Parking Brake Lock
Pull the parking brake lever (1) back to lock the rear wheel.
(See illustration on page 40).
The parking brake lock will not be applied if the parking brake is not adjusted properly (page 161).

To Release the Parking Brake Lock

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.

RIGHT SIDE



(1) parking brake lever

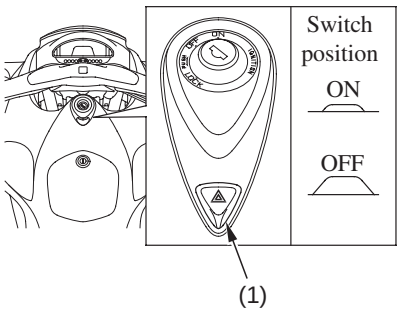
Hazard Switch

The hazard switch (1) should be used only when the motorcycle is stopped under emergency or hazardous condition.

To operate it, turn the ignition key to the ON position, and push the hazard switch. The front and rear turn signals will blink simultaneously until you push the switch again.

All of the turn signals will keep blinking even after you turn the ignition key to the OFF position.

If the switch is OFF position for more than two seconds, and you push the switch again, the turn signals will not blink.



(1) hazard switch

Be sure to turn the switch off when the hazard warning is no longer required, or the turn signals will not work properly and may confuse other drivers.

HFT (Human-Friendly Transmission)

HFT is a hydraulic mechanical automatic transmission. It is a computerized control system with neutral and two selectable modes, automatic shift mode and 6-speed manual mode.
Automatic shift mode has two options: D mode and S mode.

Neutral
Under the following conditions, the driving force does not transmit.

- The ignition switch is ON and engine is not running.
- The engine is starting and the neutral indicator is ON.

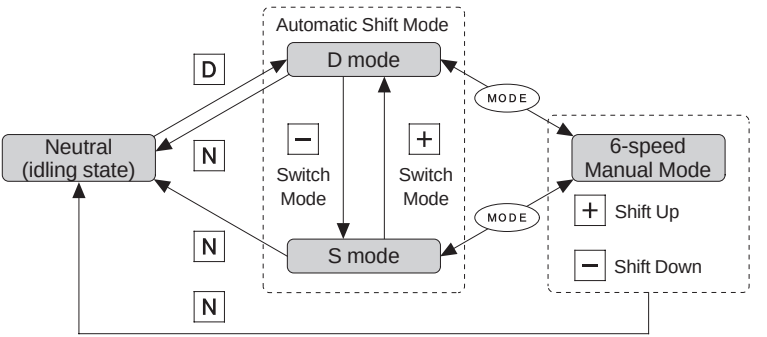
Automatic Shift Mode
In this mode the transmission will automatically between low speed and high speed, depending on the throttle opening and the vehicle speed. You can select D mode or S mode.

D Mode:
This is default automatic shift mode. The shift points are optimized for economy and comfort. Select D for normal riding.

S Mode:
Select the S mode when you need more acceleration for riding up a steep hill, if you are in stop-and-go traffic, or if you are riding with a passenger. The shift points are optimized for quicker acceleration.

6-speed Manual Mode
In this mode, the rider can shift up and down manually in six-stages by using the up shift and down shift switches.

To switch modes between neutral and each drive mode, use the switches of the right and left handlebars as shown in the illustration. Refer to following pages for more information.



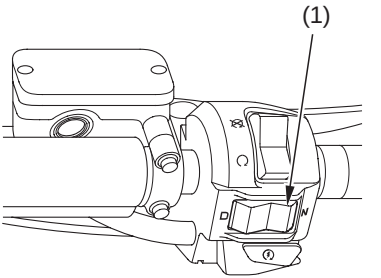
Switching Between Neutral and Automatic Shift Mode or 6-speed Manual Mode

When you operate the N-D shift switch (1), make sure of the following:

- Your motorcycle is stopped.
- The engine is running.
- The throttle is fully closed.

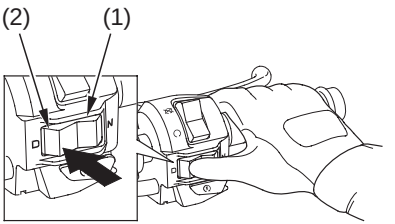
The HFT can only be switched between neutral and the D mode when idling.

If the throttle is opened while switching the HFT between neutral and the D mode, the engine will stop.

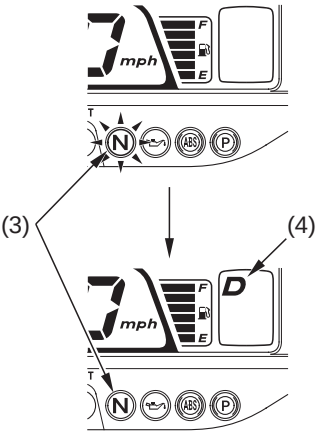


(1) N-D shift switch

To switch the transmission into D mode:
Press and hold the D (drive) side (2) of the N-D shift switch until the neutral indicator (3) turns off and the D mode indicator (4) comes on.

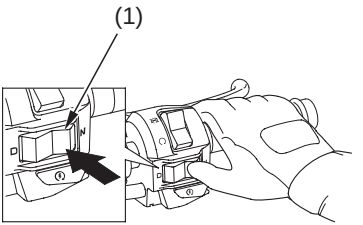


(1) N-D shift switch
(2) N-D shift switch (D)

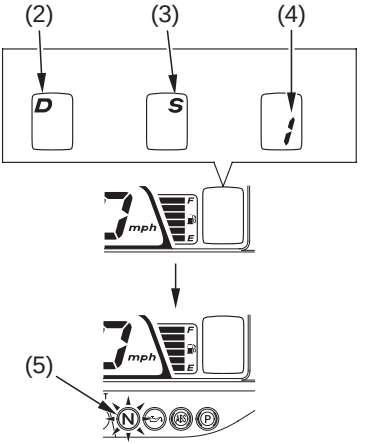


(3) neutral indicator
(4) D mode indicator

To switch the transmission into neutral:
Press and hold the N (neutral) side (1) of the N-D shift switch in each drive mode until the D mode indicator (2), S mode indicator (3) or gear position indicator (4) disappears and the neutral indicator (5) turns on.



(1) N-D shift switch (N)



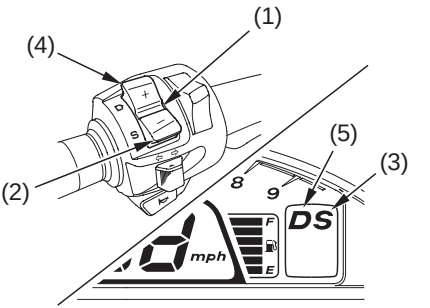
(2) D mode indicator
(3) S mode indicator
(4) gear position indicator
(5) neutral indicator

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 down shift switch (−) (2) to switch to the S mode and the S mode indicator (3) comes on.

Switching S mode to D mode:
Press the up shift switch (+) (4) to switch to the D mode and the D mode indicator (5) comes on.



(1) shift switch
(2) down shift switch (−)
(3) S mode indicator
(4) up shift switch (+)
(5) D mode indicator

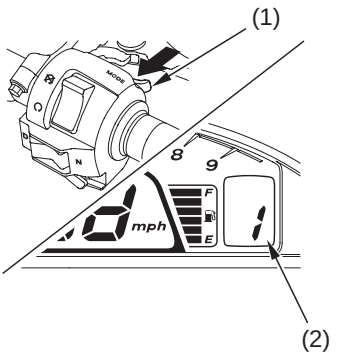
Switching Between Automatic Shift Mode and 6-speed Manual Mode

Switching Automatic Shift Mode to 6-speed Manual Mode:

Press the mode select switch (1). The gear position indicator (2) appears in the instrument panel to show the selected gear position.

When switching from automatic shift mode to 6-speed manual mode, the indicator is switched to the corresponding position.

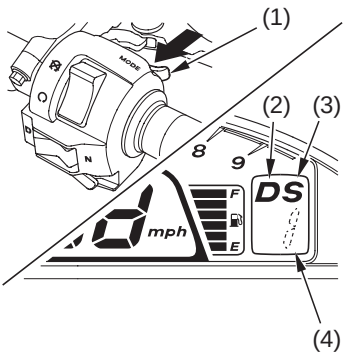
- When switching from automatic shift mode to 6-speed manual mode, engine rpm will change to match the suitable gear position for the speed.



(1) mode select switch
(2) gear position indicator

Switching 6-speed Manual Mode to Automatic Shift Mode:
Press the mode select switch (1). The shift indicator (4) goes off and the D mode indicator (2) or S mode indicator (3) appears. When switching from 6-speed manual mode to automatic shift mode, the drive mode changes depending on the last selection.

- If you press and hold the mode select switch, you cannot use the 6-speed manual shift mode.



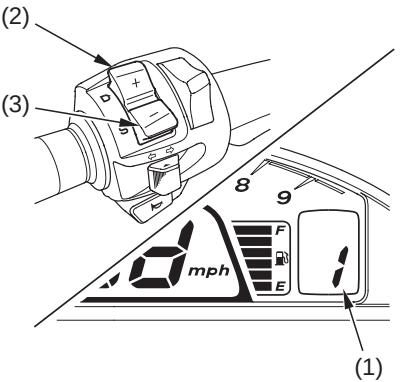
(1) mode select switch
(2) D mode indicator
(3) S mode indicator
(4) shift indicator

Shifting When the 6-speed Manual Mode is Selected

Press the shift switch to shift gears when the 6-speed manual mode is selected. The shift indicator (1) shows the gear position.

When the 6-speed manual mode is selected, shifting is not automatic. When shifting, make sure the tachometer does not enter the red zone.

To upshift the transmission, press the up shift switch (+) (2) once.
To downshift the transmission, press the down shift switch (−) (3) once.

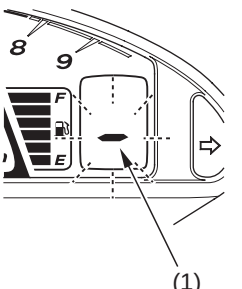


(1) shift indicator
(2) up shift switch (+)
(3) down shift switch (−)

Shifting Restriction:
The transmission cannot be shifted if the travel device is damaged or the engine is over-revved.

- Operating the shift switch (+) or (−) once changes one gear. The sequential shifting cannot be done if the shift switch (+) or (−) is pressed and held. To shift gears consecutively, you need to continue to press and release either the (+) or (−) shift switches.
- If your speed is too low while riding in the 6-speed manual mode, the transmission automatically downshifts.

If There is a Failure in HFT
The ‘‘−’’ (1) flashes to indicate a failure in the HFT if the D mode or S mode will not function in the automatic shift mode, or if the 6-speed manual mode will not function. See your Honda dealer as soon as possible.



(1) “−” icon

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

For information about adjusting the suspension on your Honda, see page 152 .

Are You Ready to Ride?

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

- Read this owner's manual.
- Make sure you understand all the safety messages.
- Know how to operate all the controls.

Before each ride, be sure:

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

Make sure your passenger is ready to ride, too, and is wearing proper gear including a helmet.

If you must carry an extra helmet while riding, use a commercially available elastic cord, strap, or net to secure the helmet to the seat.

Protective Apparel

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

Helmet 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-colored helmet and reflective strips can make you more noticeable in traffic.

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

⚠ 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.

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 help protect your hands.

(cont'd)

- 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. Avoid loose clothes that could get caught on any part of your motorcycle.

Rider Training

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

We urge all riders to take a certified course approved by the Motorcycle Safety Foundation (MSF). New riders should start with the basic course, and even experienced riders will find the advanced course beneficial. For information about the MSF training course nearest you, call the national toll-free number: (800) 446-9227.

Other riding tips can be found in the *Riding Tips* booklet that came with your motorcycle (USA only).

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

⚠WARNING

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

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

Pre-ride Inspection

Check the following items before you get on the motorcycle:

Tires & Wheels	Look at the tires. If a tire appears low, use an air pressure gauge to check its pressure. Also look for signs of excessive wear (page 164) or damage to the tires and wheels.

Is Your Motorcycle Ready to Ride?

Leaks, Loose Parts	Walk around your motorcycle and look for anything that appears unusual, such as a leak or loose cable.
Lights	Make sure the headlight, brakelight, taillight, license light, and turn signals are working properly.

If you are carrying a passenger or cargo, also check the following:

Load Limits	Make sure you do not exceed the load limits (page 61).
Cargo	Check that all cargo is secure.
Adjustments	Adjust the rear suspension (page 153) according to your load.

Check these items after you get on the motorcycle:

Throttle	Rotate the throttle to check it moves smoothly without binding.
Brakes	Pull the brake lever and press on the brake pedal to check that they operate normally.
Gauge & Indicators	Turn the ignition on and check for normal operation of the gauge and indicators (pages 14 , 15).

If you haven't ridden the motorcycle in over a week, you should also check other items, such as the oil level and other fluids. See *Periodic Maintenance* (page 95). Periodic maintenance should also be done at least once a month, no matter how often you ride.

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

Load Limits & Guidelines

Your motorcycle has been designed to carry you and one passenger. When you carry a passenger, you may feel some difference during acceleration and braking. But so long as you keep your motorcycle well-maintained, with good tires 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 impair your motorcycle's handling, braking, and stability. Non-Honda accessories, improper modifications, and poor maintenance can also reduce your safety margin.

Loading

How much weight you put on your motorcycle, 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 motorcycle:

maximum weight capacity:
344 lbs (156 kg)
includes the weight of the rider, passenger, all cargo, and all accessories.

Loading Guidelines

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

If you wish to carry more cargo, check with your Honda dealer for advice, and be sure to read the information regarding accessories on page 5 .

Load Limits & Guidelines

Improperly loading your motorcycle can affect its stability and handling. Even if your motorcycle is properly loaded, you should ride at reduced speeds and never exceed 80 mph (130 km/h) when carrying cargo.

Follow these guidelines whenever you carry a passenger or cargo:

- Check that both tires are properly inflated (page 162).
- If you change your normal load, you may need to adjust the rear suspension (page 153).
- To prevent loose items from creating a hazard, make sure that all cargo is tied down securely before you ride.
- Place cargo weight as low and close to the center of your motorcycle as possible.
- Balance cargo weight evenly on both sides.

Basic Operation & Riding

This section gives basic riding instructions, including how to start and stop your engine, and how to use the throttle and brakes. It also provides important information on riding with a passenger or cargo.

To protect your new engine and enjoy optimum performance and service life, refer to Break-in Guidelines (page 236).

To protect the catalytic converter in your motorcycle's exhaust system, avoid extended idling and the use of leaded gasoline.

Safe Riding Precautions

Before riding your motorcycle for the first time, please review the *Motorcycle Safety* section beginning on page 1, and the *Before Riding* section beginning on page 53 .

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

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 motorcycle.

Always follow the proper starting procedure described below.

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

Your motorcycle is equipped with a side stand ignition cut-off system. If the side stand is down, the engine cannot be started unless the N-D shift switch is in the N (neutral) position before raising the side stand.

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.

Preparation

Before starting, insert the key, turn the ignition switch ON, and confirm the following:

- The rear wheel is locked by applying the parking brake lever.
- The engine stop switch is set to RUN.
- Raise the side stand.

(cont'd)

- The transmission is in neutral (neutral indicator is ON).
- The low oil level/pressure indicator is ON.
- The ABS indicator light is ON.
- The PGM-FI malfunction indicator lamp (MIL) is OFF.
- The high coolant temperature indicator is OFF.

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

Starting Procedure

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

Any Air Temperature

1. With the throttle completely closed, press the start button.

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

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 with excess fuel. To clear a flooded engine:

1. Leave the engine stop switch set to RUN.
2. Open the throttle fully.
3. Press the start button for 5 seconds.
4. Follow the normal starting procedure.
5. If the engine starts, then open the throttle slightly if idling is unstable. If the engine does not start, wait 10 seconds, then follow steps 1 — 4 again.

If the engine still won't start, refer to *If Your Engine Quits or Won't Start,* page 197 .

Bank Angle Sensor Ignition Cut-off System

Your motorcycle's banking (lean angle) sensor system is designed to automatically stop the engine and fuel pump if the motorcycle is overturned.

Before restarting the engine, you must turn the ignition switch to the OFF position and then back to ON. The engine will not restart until you perform this procedure.

How to Stop the Engine

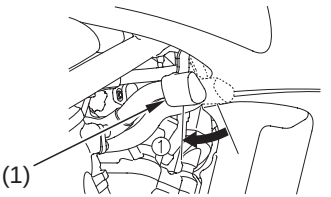
Normal Engine Stop
To stop the engine, press and hold the N (neutral) side of the N-D shift switch until the neutral indicator comes on, and turn the ignition switch OFF.

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

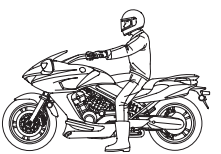
If your motorcycle is stopped with the engine stop switch OFF and the ignition switch ON, the headlight, taillight, and license light will remain on, resulting in battery discharge.

Emergency Engine Stop
To stop the engine in an emergency, use the engine stop switch. To operate, press the switch to the OFF position.

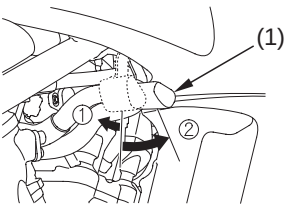
1. To prevent unexpected movement, make sure the throttle is closed and the parking brake is locked (page 39).



2. Mount the motorcycle from the left side keeping at least one foot on the ground to steady the motorcycle.



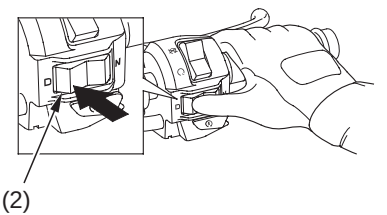
3. To unlock the rear wheel, release the parking brake lever (1).



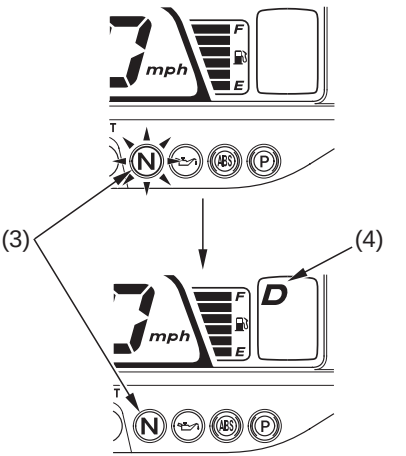
(1) parking brake lever

(cont'd)

4. While the engine is idling, press and hold the D (drive) side (2) of the N-D shift switch until the neutral indicator (3) turns off and the D mode indicator (4) comes on.



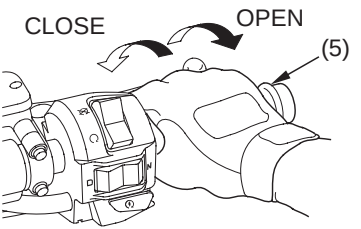
(2) N-D shift switch (D)



(3) neutral indicator
(4) D mode indicator

5. To accelerate, open the throttle (5) gradually. The motorcycle will move forward.

   Do not blip (rapidly open and close) the throttle as the motorcycle will move forward suddenly.

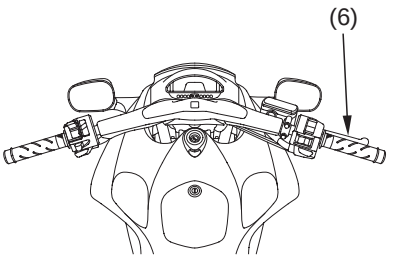


(5) throttle

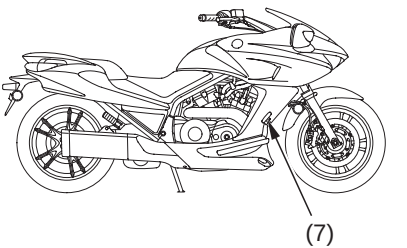
6. To decelerate, close the throttle.

(cont'd)

7. To slow the motorcycle, reduce the throttle and apply the front (6) and rear (7) brakes together.
   Using only one brake reduces stopping performance.



(6) front brake lever

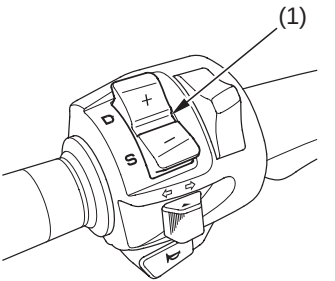


(7) rear brake pedal

Riding with HFT

Automatic Shift Mode
In this mode the transmission shifts 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 between D mode and S mode depending on riding circumstances.

When going up hill, switch to S mode for more power, depending on how steep the road is before you.



(1) shift switch

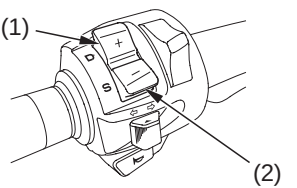
6-speed Manual Mode
In this mode you can manually shift between 1st and 6th speed by operating the shift switch.

Upshifting sequence:
To upshift transmission, press the up shift switch (+) (1) once.
Shifting is not automatic in the 6-speed manual mode. Shift up to prevent the tachometer from entering the red zone.

Downshifting sequence:
To downshift transmission, press the down shift switch (−) (2) once.

When passing, shift down for more powerful acceleration.

If your speed is too low in 6-speed manual mode, the transmission will automatically downshift.

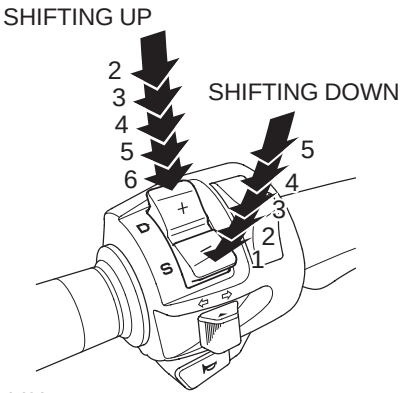


(1) up shift switch (+)
(2) down shift switch (−)

Proper shifting will provide better fuel economy.
When changing gears under normal conditions, use these recommended shift points:

Shifting Up:

From 1st to 2nd:	16 mph (25 km/h)
From 2nd to 3rd:	19 mph (30 km/h)
From 3rd to 4th:	25 mph (40 km/h)
From 4th to 5th:	31 mph (50 km/h)
From 5th to 6th:	40 mph (65 km/h)



shifting pattern

Shifting Restriction:
The transmission cannot be shifted if the travel device is damaged or if the engine is over-revved.

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

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

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

This model is also equipped with an Anti-Lock Brake System (page 79).

To slow or stop, apply the brake lever and brake pedal smoothly.

Gradually increase braking as you feel the brakes slowing your speed.

Braking

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

Your ability to brake in a turn and to brake hard in an emergency situation are important riding skills. We suggest attending a Motorcycle Safety Foundation experienced rider training course (page 56) to retain these skills.

When riding in wet or rainy conditions, or on loose surfaces, the ability to maneuver and stop will be reduced. All of your actions should be smooth under these conditions. Rapid acceleration, braking or turning may cause loss of control.

For your safety, exercise extreme caution when braking, accelerating or turning.

When descending a long, steep grade, use engine compression braking by downshifting using the 6-speed manual mode, with intermittent use of both brakes. Continuous brake application can overheat the brakes and reduce their effectiveness.

Riding with your foot resting on the brake pedal or your hand on the brake lever may actuate the brakelight, giving a false indication to other drivers. It may also overheat the brakes, reducing effectiveness.

Anti-Lock Brake System (ABS)

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 motorcycle can still lose traction, causing a loss of control.

In some situations, a motorcycle with ABS may require a longer stopping distance to stop on loose or uneven surfaces than an equivalent motorcycle 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 is always on.

ABS may be activated by riding over a sharp drop or rise in the road level.
It is important to follow the tire recommendations (page 169). The ABS computer works by comparing wheel speed. Non-recommended tires can affect wheel speed and may confuse the ABS computer.
ABS does not function at low speeds (approximately 6 mph (10 km/h) or below).
ABS does not function if the battery is discharged.

ABS Indicator

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

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

Turn the ignition ON again. The indicator should come on, and go off after you ride the motorcycle at speeds above 6 mph (10 km/h). If it does not go off, ABS is not functioning, but the brakes still work as part of the Combined Braking System and provide normal stopping ability. However, you should have the system checked by Honda dealer as soon as possible.

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

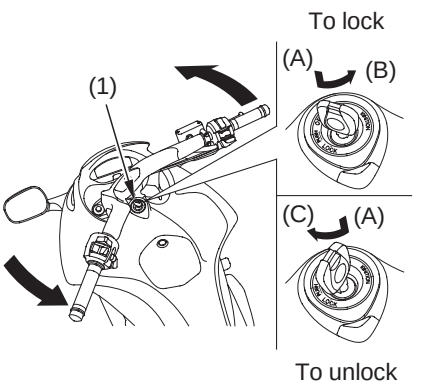
1. Look for a level parking area. If you can't park on a paved surface, make sure the ground surface is firm, especially under the side stand.
   If you must park on a hill, apply the parking brake lock, and position the rear tire against the curb at a 45 degree angle.

   Make sure flammable materials such as dry grass or leaves do not come in contact with the exhaust system when parking your motorcycle. Refer to *Catalytic Converter*, page 244 .

To avoid possible heat damage to your motorcycle or personal belongings, do not cover the exhaust muffler with a protective cover or any clothing within 20 minutes after shutting off the engine.

2. Use the side stand to support the motorcycle while parked.
   - To lower the side stand, use your foot to guide it down. Remember that lowering the side stand with the transmission in the automatic shift mode or 6-speed manual mode will stop the engine. That is a function of the side stand ignition cut-off system.
   - Check that the side stand is down all the way so that the side stand ignition cut-off system (page 65) is activated.
   - If you have to park on a soft surface, insert something solid under the side stand for support.

(cont'd)

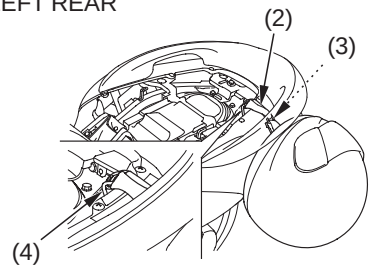


(1) ignition key

(A) push in
(B) turn to LOCK
(C) turn to OFF

3. Use the steering lock, which locks the handlebar in place. Turn the handlebar all the way to the left. Push in on the ignition key (1) and turn it to LOCK. Remove the key.
(To unlock the steering lock, insert and push down on the key and turn it to the right to the OFF position.)

LEFT REAR



(2) helmet holder wire (4) helmet holder
(3) D-ring

4. Use the helmet holder wire stored in the tool kit to secure your helmet with your motorcycle:
   - Remove the rear seat (page109).
   - Route either end of the helmet holder wire (2) through the helmet's D-ring (3).
   - Install the rear seat and lock it securely.

     Remove the helmet holder wire and store it in the tool kit when it is not used.

⚠ WARNING

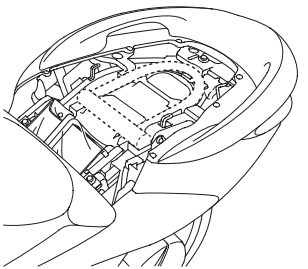
Riding with a helmet attached to the holder can interfere with the rear wheel or suspension and could cause a crash in which you can be seriously hurt or killed.

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

Theft-prevention Tips

- Park your motorcycle in a locked garage whenever possible. If a garage isn't available, park in a concealed area or in a well-lit area with enough pedestrian traffic to discourage a thief.
- Always take the ignition key with you.
- Always use the steering lock (page 82), even if you're parking for just a minute or two. A thief can easily push an unlocked motorcycle to a waiting truck.
- In addition to the steering lock, use a good quality anti-theft device made specifically to lock a motorcycle to a secure object.
- If you decide to use an anti-theft device, select one of good quality and be sure to follow the manufacturer's instructions.
- The rear fender has a storage compartment to store a U-shaped lock under the rear seat. Some U-shaped locks may not be stored in the compartment due to their size or design.

UNDER REAR SEAT



- Keep your owner's manual, current registration, and insurance information with your motorcycle. This will make it easier for the authorities to find you if your motorcycle is stolen and recovered.

Riding with a Passenger or Cargo

Your motorcycle is designed to carry you and one passenger. Whenever you add a passenger or cargo, you must be careful not to exceed the total load limits for this vehicle (*Load Limits,* page 61). Make sure your cargo is properly secured (*Loading Guidelines,* page 61).

Also consider adjusting the suspension (page 152) for the extra load.

Be aware that carrying a passenger or heavy cargo can affect acceleration, braking, and handling.

Before riding with a passenger, make sure your passenger is wearing the proper protective apparel (page 54).

Tell your passenger to hold the grab rail or your waist, lean with you in the turns, and keep their feet on the passenger footpegs at all times, even when the motorcycle is stopped at a traffic light.

To help keep your motorcycle in good shape, this section includes a Maintenance Schedule for required service, a list of periodic checks you should perform at least once a month, and step-by-step instructions for specific maintenance tasks. You'll also find important safety precautions, information on fuels and oils, and tips for keeping your Honda looking great.

For information about the exhaust emission and noise emission requirements of the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Environment Canada (EC), see page 237.

For information about replacing fuses, see page 216.

USA only

Maintenance, replacement or repair of the emission control devices and systems may be performed by any motorcycle repair establishment or individual using parts that are ''certified'' to EPA standards.

Before You Service Your Honda

(cont'd)

Servicing Your Honda

The following table summarizes the three types of inspections and servicing recommendations for your motorcycle. Both the pre-ride inspection and the scheduled maintenance at the recommended intervals are necessary to assure safe and dependable performance. The periodic checks provide additional confidence in your motorcycle's performance.

Type of Inspection/Service	Refer to page:	When Performed	Who Performs
Pre-ride Inspection	57	before every ride	you
Periodic Maintenance	94	monthly*	you
Maintenance Schedule	96	interval on schedule	your Honda dealer**

* more often if you ride frequently or long distances; or anytime you clean your motorcycle
**unless you have the proper tools and service data and are mechanically qualified

The Importance of Maintenance

Keeping your motorcycle well-maintained is absolutely essential to your safety. It's also a good way to protect your investment, get maximum performance, avoid breakdowns, and have more fun. A properly maintained motorcycle will also help to reduce air pollution.

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

⚠ WARNING

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

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

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

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

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.

Important Safety Precautions

- Make sure the engine is off before you begin any maintenance or repairs. This will help eliminate several potential hazards:
  Carbon monoxide poisoning from engine exhaust. Be sure there is adequate ventilation whenever you operate the engine.
  Burns from hot motorcycle 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 motorcycle from falling over, park it on a firm, level surface, using the side stand or a maintenance stand to provide support.
- To reduce the possibility of a fire or explosion, be careful when working around gasoline. Use only non-flammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.

Remember that your Honda dealer knows your motorcycle 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. If you have the tools and skills required for additional maintenance jobs, you can purchase an official Honda Service Manual (page 248).

Periodic Maintenance

In addition to the regularly scheduled maintenance (page 96) and daily pre-ride inspection (page 57), consider performing the periodic checks on the following page at least once a month, even if you haven't ridden your motorcycle, or as often as once a week if you ride frequently or for long distances. It's a good idea to perform this maintenance any time you clean your motorcycle.

Check the odometer reading and perform any scheduled maintenance checks that are needed (page 96). Remember, more frequent checks may be needed for riding in severe conditions.

Tires & Wheels	Check the air pressure with a gauge and add air if needed (page 162). Examine the tread for wear (page 164). Look closely for nails, embedded objects, cuts, and other types of damage (page 164). Roll your motorcycle so you can inspect the entire surface. Check the condition of the wheels.
Fluids	Check the levels of the engine oil (page129), coolant (page137), brake fluid (page 157), and final drive oil (page 143). Add the correct fluid as necessary, and investigate the cause of any low fluid level.
Lights	Make sure the headlight, brakelight, taillight, license light, and turn signals are working properly.
Freeplay	Check the freeplay of the throttle grip (page 147).
Fuses	Make sure you have a full supply of spare fuses.
Nuts & Bolts	Check the major fasteners and tighten as needed.

Maintenance Schedule

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

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

Some items in the Maintenance Schedule can be performed with basic mechanical skills and hand tools. Procedures for these items are provided in this manual. Other items involve more extensive procedures and may require special training, tools, and equipment. We recommend that you have your Honda dealer perform these tasks unless you have advanced mechanical skills and the required tools and equipment. Procedures for such items in this schedule are provided in an official Honda Service Manual available for purchase (page 248).

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

Perform the pre-ride inspection (page 57) and owner maintenance (page 96) at each scheduled maintenance period.

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

* Should be serviced by your Honda dealer, unless you have the proper tools and service data and are mechanically qualified. Refer to the official Honda Service Manual (page 248).

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

Maintenance Schedule

Summary of Maintenance Schedule Notes & Procedures:

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. California type only.
5. Replace every 2 years, or at indicated odometer interval, whichever comes first. Replacement requires mechanical skill.

Maintenance Procedures:

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

			FREQUENCY	ODOMETER READING (Note 1)								
				× 1,000 mi	0.6	4	8	12	16	20	24	Refer to
ITEM			NOTE	× 1,000 km	1.0	6.4	12.8	19.2	25.6	32.0	38.4	page
EMISSIONS-RELATED ITEMS	*	FUEL LINE					I		I		I	—
	*	THROTTLE OPERATION					I		I		I	147
		AIR CLEANER	2					R			R	—
		CRANKCASE BREATHER	3			C	C	C	C	C	C	142
	*	SPARK PLUGS			EVERY 16,000 mi (25,600 km) I, EVERY 32,000 mi (51,200 km) R							149
	*	VALVE CLEARANCE			I		I		I		I	—
		ENGINE OIL			INITIAL= 600 mi (1,000 km) or 1 month: R REGULAR= EVERY 8,000 mi (12,800 km) or 12 months: R							125
		ENGINE OIL FILTER			R		R		R		R	130
		HFT OIL FILTER (ELEMENT)			R		R		R		R	133
	*	ENGINE IDLE SPEED			I		I		I		I	—

* Should be serviced by your Honda dealer, unless you have the proper tools and service data and are mechanically qualified. Refer to the official Honda Service Manual (page 248).

Maintenance Schedule

		ITEM	NOTE	FREQUENCY / ODOMETER READING (Note 1)								
				× 1,000 mi	0.6	4	8	12	16	20	24	Refer to
				× 1,000 km	1.0	6.4	12.8	19.2	25.6	32.0	38.4	page
EMISSIONS-RELATED ITEMS		RADIATOR COOLANT	5				I		I		R	136
	*	COOLING SYSTEM					I		I		I	—
	*	SECONDARY AIR SUPPLY SYSTEM					I		I		I	—
	*	EVAPORATIVE EMISSION CONTROL SYSTEM	4					I			I	—

* Should be serviced by your Honda dealer, unless you have the proper tools and service data and are mechanically qualified. Refer to the official Honda Service Manual (page 248).

		ITEM	NOTE	FREQUENCY / ODOMETER READING (Note 1) × 1,000 mi	0.6	4	8	12	16	20	24	Refer to
				× 1,000 km	1.0	6.4	12.8	19.2	25.6	32.0	38.4	page
NON-EMISSION-RELATED ITEMS		FINAL DRIVE OIL					I		I		R	143
		BRAKE FLUID	5			I	I	R	I	I	R	156
		BRAKE PAD WEAR				I	I	I	I	I	I	159, 160
		BRAKE SYSTEM			I		I		I		I	155
	*	BRAKELIGHT SWITCH					I		I		I	—
	*	BRAKE LOCK OPERATION			I	I	I	I	I	I	I	39
	*	HEADLIGHT AIM					I		I		I	—
		SIDE STAND					I		I		I	171
	*	SUSPENSION					I		I		I	—
	*	NUTS, BOLTS, FASTENERS			I		I		I		I	—
	**	WHEELS/TIRES					I		I		I	—
	**	STEERING HEAD BEARINGS			I		I		I		I	—

* Should be serviced by your Honda dealer, unless you have the proper tools and service data and are mechanically qualified. Refer to the official Honda Service Manual (page 248).

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

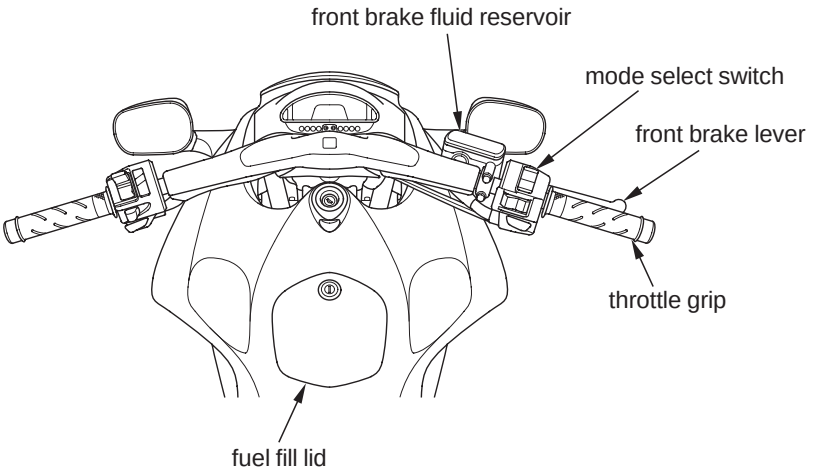
Maintenance Record

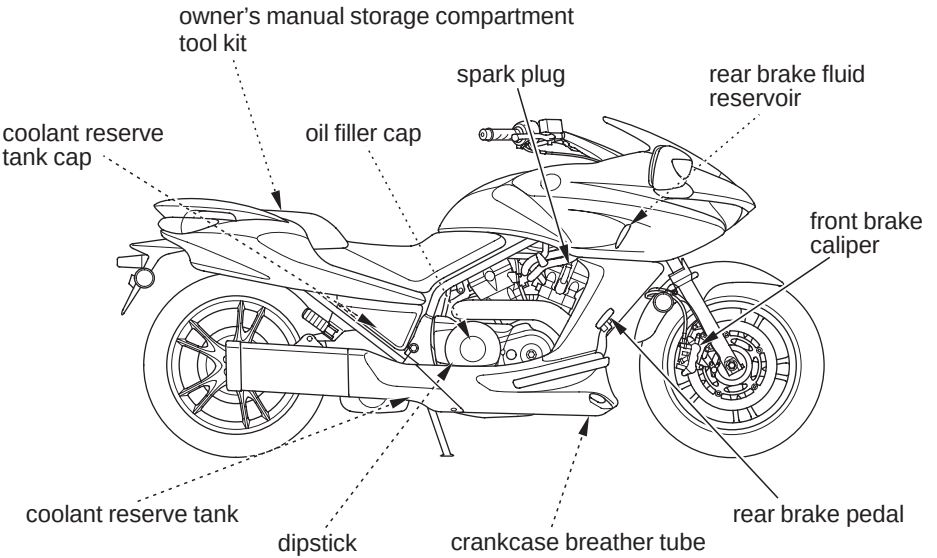
Keeping an accurate maintenance record will help ensure that your motorcycle is properly maintained. Retain detailed receipts to verify the maintenance was performed. If the motorcycle is sold, these receipts should be transferred with the motorcycle to the new owner. Make sure whoever performs the maintenance completes this record. All scheduled maintenance, including the 600 mile (1,000 km) initial maintenance, is considered a normal owner operating cost and will be charged for by your dealer. Use the space under Notes to record anything you want to remind yourself about or mention to your dealer.

Miles (km)	Odometer	Date	Performed By:	Notes
600 (1,000)				
4,000 (6,400)				
8,000 (12,800)				
12,000 (19,200)				
16,000 (25,600)				
20,000 (32,000)				

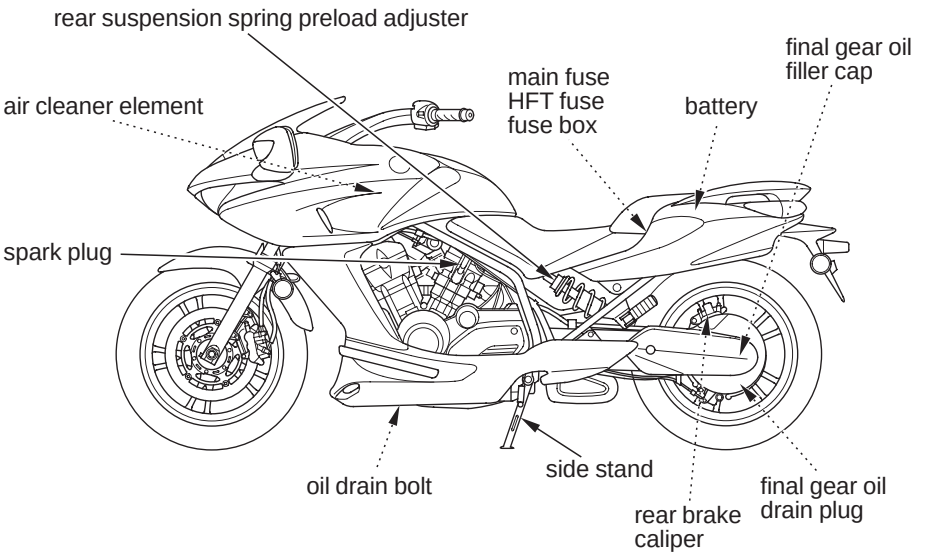
Miles (km)	Odometer	Date	Performed By:	Notes
24,000 (38,400)				
28,000 (44,800)				
32,000 (51,200)				
36,000 (57,600)				
40,000 (64,000)				
44,000 (70,400)				
48,000 (76,800)				
52,000 (83,200)				
56,000 (89,600)				
60,000 (96,000)				
64,000 (102,400)				
68,000 (108,800)				

Maintenance Component Locations




owner's manual storage compartment
tool kit
spark plug
rear brake fluid
reservoir
coolant reserve
tank cap
oil filler cap
front brake
caliper
coolant reserve tank
dipstick
crankcase breather tube
rear brake pedal

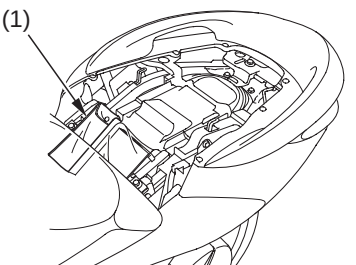
Maintenance Component Locations



The tool kit (1) is stored under the rear seat (page109).

An optional, larger tool kit may be available. Check with your Honda dealer's parts department.

UNDER REAR SEAT



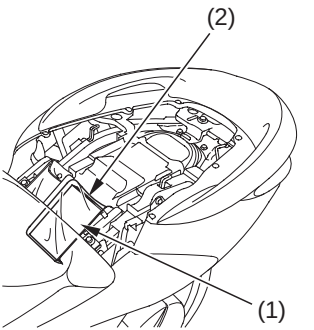
(1) tool kit

Owner's Manual Storage

Your motorcycle provides storage for the owner's manual so you'll have it with you for easy reference. Store your owner's manual (and other documents) in the plastic storage bag (1) in the owner's manual storage compartment (2) under the rear seat (page109).

Be careful not to flood this area when washing your motorcycle.

UNDER REAR SEAT



(1) plastic storage bag
(2) owner's manual storage compartment

Refer to *Safety Precautions* on page 92 .

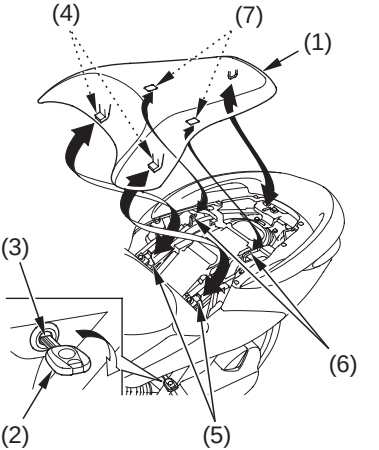
The rear seat must be removed for battery or fuse maintenance.

Rear Seat Removal

To remove the rear seat (1), insert the ignition key (2) into the seat lock (3). Turn it clockwise, then pull the rear seat back and up.

To install the rear seat, insert the prongs (4) into the seat hook (5) and insert the frame prongs (6) into the guide hooks (7), and then push down on the rear of the rear seat.

Be sure the seat is locked securely in position after installation.



(1) rear seat
(2) ignition key
(3) seat lock
(4) prongs
(5) seat hook
(6) frame prongs
(7) guide hooks

Seat Removal

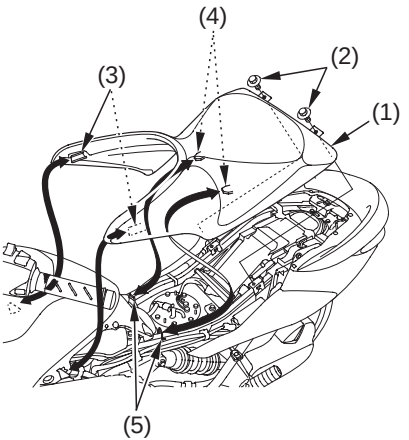
Refer to *Safety Precautions* on page 92 .

The front seat must be removed for fuse maintenance.

Front Seat Removal

To remove the front seat (1), remove the rear seat (page 109) and the mounting bolts (2), and then pull the seat up and back.

To install the front seat, insert the front tabs (3) into the recesses and the rear tabs (4) into the rear stays (5) on the frame, and tighten the mounting bolts securely. Install the rear seat.



(1) front seat
(2) mounting bolts
(3) front tabs
(4) rear tabs
(5) rear stays

Refer to *Safety Precautions* on page 92 .

The right side cover must be removed to check the engine oil level and change the engine oil, engine oil filter and HFT oil filter.

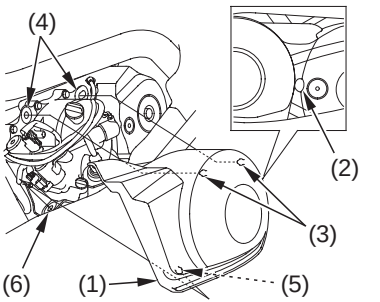
Immediately after stopping the engine, the engine, exhaust pipe and muffler will be hot. Be careful not to burn yourself.

Removal

1. By pulling the right side cover (1) toward you with the notch (2), pull out the upper prongs (3) from the upper grommets (4).
2. By pulling up the right side cover, pull out the lower prong (5) from the lower grommet (6).

Installation

1. Align the lower prong with the lower grommet.
2. Align the upper prongs with the upper grommets.
3. Push the prongs in.



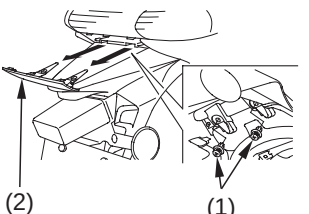
(1) right side cover
(2) notch
(3) upper prongs
(4) upper grommets
(5) lower prong
(6) lower grommet

Rear Cowl Removal

The right rear cowl must be removed to inspect the coolant reserve tank. The left rear cowl must be removed for battery maintenance.
The right and left rear cowls can be removed in the same manner.

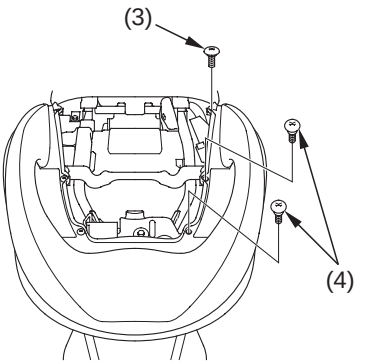
Removal

1. Remove the rear seat (page109).
2. Remove the clips A (1) and rear center cowl (2).



(1) clips A (2) center cowl

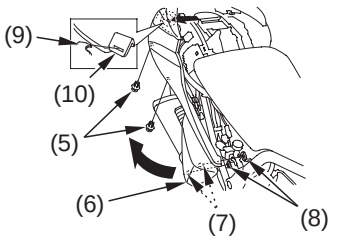
3. Remove the screw A (3) and screws B (4).



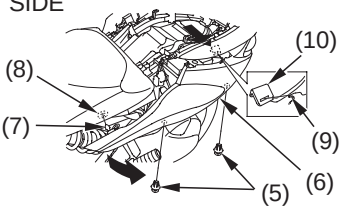
(3) screw A (4) screws B

4. Remove the clips A (5).
5. Pull the front of the rear cowl (6) forward and carefully pull the rear cowl prong(s) (7) out from the grommet(s) (8).
6. Remove the upper tab (9) on the center of the rear cowl from the hook (10).

RIGHT SIDE



LEFT SIDE



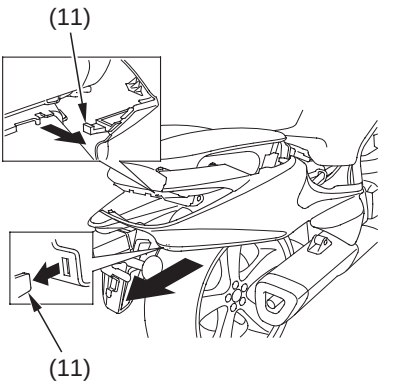
(5) clips A
(6) rear cowl
(7) prong(s)
(8) grommet(s)
(9) upper tab
(10) hook

(cont'd)

Rear Cowl Removal

7. While sliding the rear cowl back, remove the rear tabs (11) from the rear fender and remove the rear cowl.

RIGHT SIDE



(11) rear tabs

Installation

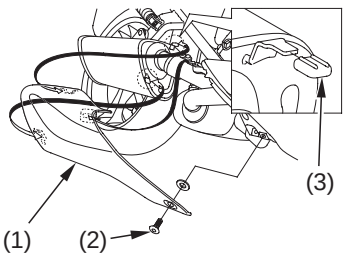
1. Attach the rear cowl in the reverse order of removal.
2. Tighten the screw A and screws B.
3. Install the rear center cowl and clips A.
4. Install the rear seat (page 109).

Under Cowl Removal

Refer to *Safety Precautions* on page 92 .

The right under cowl must be removed to replace the HFT oil filter.

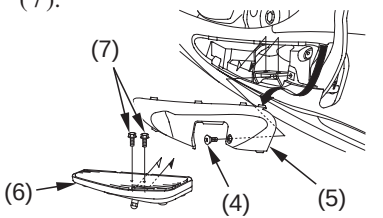
Immediately after stopping the engine, the engine, exhaust pipe and muffler will be hot. Be careful not to burn yourself.



(1) muffler cover
(2) muffler cover bolt
(3) rubber cap

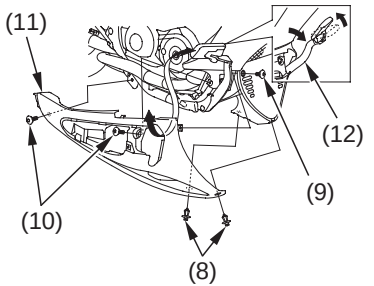
Removal

1. To remove the muffler cover (1), remove the muffler cover bolt (2) and washer, and pull out from the prongs.
2. Remove the screw (4) and pull out the under cowl cover (5).
3. Remove the right step board (6) by removing the step board mounting bolts (7).



(4) screw
(5) under cowl cover
(6) right step board
(7) step board mounting bolts

4. Remove clips B (8), bolt A (9) and bolts B (10) and pull out the right under cowl (11).
   - Carefully pull out the right under cowl from around the rear brake pedal (12) by moving it as shown in the illustration.



(8) clips B
(9) bolt A
(10) bolts B
(11) right under cowl
(12) rear brake pedal

Installation

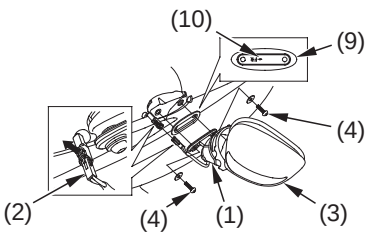
- Installation can be done in the reverse order of removal.
- Carefully route the rear brake pedal through the opening of the right under cowl.
- If either of the rubber caps came away from the prongs when removing the muffler cover, re-attach them.
- Position the muffler cover so the prongs are aligned with the hooks.
- Install the bolts and tighten to the specified torque:
  step board mounting bolts:
  19 lbf·ft (26 N·m , 2.7 kgf·m)
  muffler cover bolts:
  7 lbf·ft (9 N·m , 0.9 kgf·m)

Front Cowl Removal

The left front cowl must be removed for air cleaner maintenance.

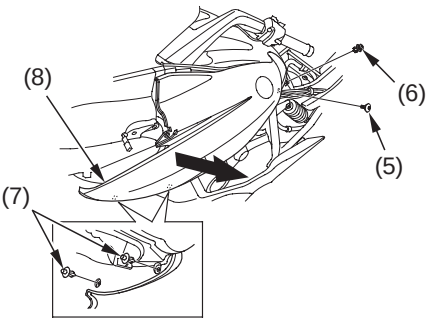
Removal

1. Remove the front seat (page 110).
2. Pull back the rubber dust cover (1).
3. Disconnect the connector (2).



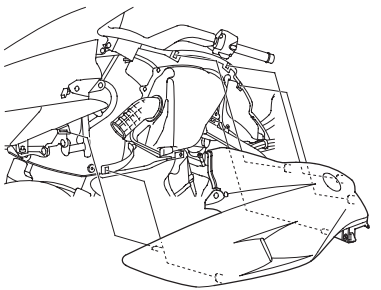
(1) rubber dust cover
(2) connector
(3) rear view mirror assembly
(4) bolts A
(9) metal plate
(10) arrow mark

4. Remove the rear view mirror assembly (3) by removing the bolts A (4) and washers.
5. Remove the bolt B (5), clip A (6) and clips B (7) and pull the front of the front cowl (8) outwards.



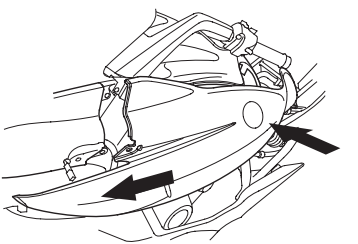
(5) bolt B
(6) clip A
(7) clips B
(8) front cowl

6. Pull the back of the front cowl to release the tabs, then pull the front cowl slightly backwards.



Installation

1. Position in front of the front cowl and align the tabs with the guides. Then, push the front cowl into place and attach the bolt and clips.
2. Install the rear view mirror assembly.
   - Install the metal plate (9) with its arrow mark (10) facing towards the front.
3. Install the front seat (page 110).

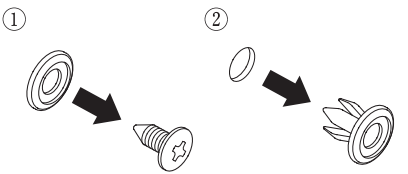


Clip Removal

Removal

①Remove the pin with a Phillips screwdriver.

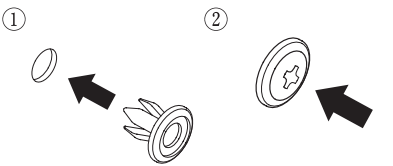
②Pull out the clip from the hole.



Installation

①Insert the clip into the hole.

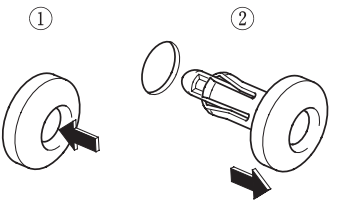
②Push the pin in.



Removal

①Press down on the center pin to release the lock.

②Pull the clip out of the hole.

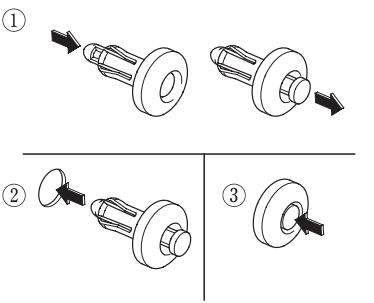


Installation

①Push the bottom of the pin.

②Insert the clip into the hole.

③Lightly press down on the center pin to lock the clip.



Refer to *Safety Precautions* on page 92 .

Fuel Recommendation

type	unleaded
pump octane number	86 (or higher)

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

The use of leaded gas will damage the catalytic converter.

Your engine is designed to use any gasoline that has a pump octane number of 86 or higher. Gasoline pumps at service stations normally display the pump octane number. For information on the use of oxygenated fuels, see page 245 .

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

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

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

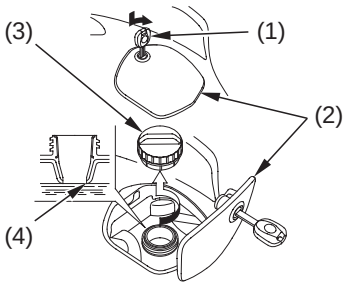
Fuel Capacity

Fuel tank capacity:
3.96 US gal (15.0 ℓ)

The tank should be refilled as soon as possible when the E segment in the fuel gauge flashes.

Refueling Procedure

Refer to *Safety Precautions* on page 92 .



(1) ignition key
(2) fuel fill lid
(3) fuel fill cap
(4) filler neck

1. Insert the ignition key (1) in the fuel fill lid (2) and turn it clockwise.

(cont'd)

2. Open the fuel fill lid.
3. Open the fuel fill cap (3).
4. Add fuel until the level reaches the bottom of the filler neck (4). Avoid overfilling the tank. There should be no fuel in the filler neck.

⚠WARNING

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

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

5. After refueling, be sure to tighten the fuel fill cap firmly by turning it clockwise until it clicks.
6. Close the fuel fill lid.
7. Remove the key from the fuel fill lid.

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

Using the proper oil (page 126) and filter, and regularly checking, adding, and changing oil will help extend your engine's life. Even the best oil wears out. Changing oil helps get rid of dirt and deposits in the engine. Operating the engine with old or dirty oil can damage your engine. Running the engine with insufficient oil can cause serious damage to the engine and transmission.

Change the engine oil as specified in the maintenance schedule on page 99 .

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

Oil Recommendation

API classification	SG or higher except oils labeled as energy conserving on the circular API service label
viscosity (weight)	SAE 10W-30
JASO T 903 standard	MA

suggested oil*
Pro Honda GN4 4-stroke oil (USA & Canada), or Honda 4-stroke oil (Canada only), or an equivalent motorcycle oil.

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

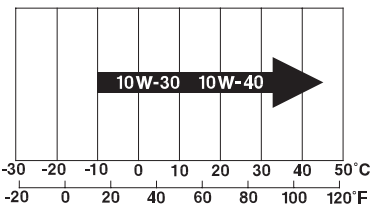
- Your motorcycle does not need oil additives. Use the recommended oil.
- Do not use oils with graphite or molybdenum additives. They may adversely affect clutch operation.
- Do not use API SH or higher oils displaying a circular API ‘‘energy conserving’’ service label on the container. They may affect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

NOT RECOMMENDED

OK

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

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

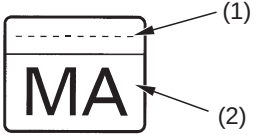


JASO T 903 standard

The JASO T 903 standard is an index 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 MA classification.



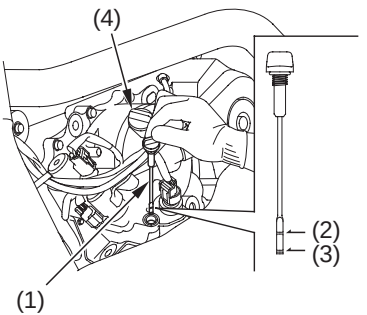
PRODUCT MEETING JASO T 903
COMPANY GUARANTEEING THIS MA PERFORMANCE:

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

Checking & Adding Oil

Refer to *Safety Precautions* on page 92 .

RIGHT SIDE



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

Immediately after stopping the engine, the engine, exhaust pipe and muffler will be hot. Be careful not to burn yourself.

1. Park your motorcycle on its side stand on a firm, level surface.
2. Remove the right side cover (page111).
3. Start the engine and let it idle for 3－5 minutes. Make sure the warning indicator and low oil pressure indicator go off. If the indicators remains on, stop the engine immediately.
4. Stop the engine and wait 2－3 minutes.
5. Remove the dipstick (1) and wipe it clean.
6. Hold the motorcycle in an upright position.
7. Insert the dipstick until it seats, but don't screw it in.

(cont'd)

8. Remove the dipstick and check the oil level.
   - If the oil is at or near the upper level mark (2) — you do not have to add oil.
   - If the oil is below or near the lower level mark (3) — remove the oil filler cap (4) and add the recommended oil until it reaches the upper level mark. (Do not overfill.)
9. Reinstall the oil filler cap.
10. Reinstall the dipstick.
11. Check for oil leaks.
12. Install the right side cover (page 111).

Changing Engine Oil & Filter

Refer to *Safety Precautions* on page 92 .

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

NOTICE

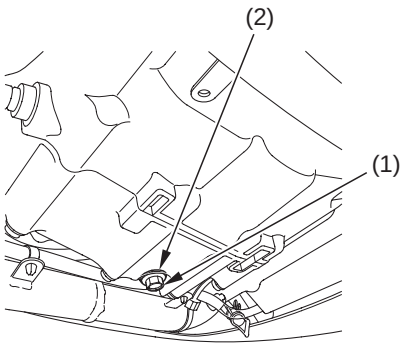
Using the wrong oil filter may result in leaks or engine and transmission damage.

This procedure requires mechanical skill and professional tools such as a torque wrench and oil filter wrench, as well as a means for disposing of the drained fluid (page 191). If you do not have the skills or the tools, see your Honda dealer.

Drain the Engine Oil:

1. Park the motorcycle on its side stand on a firm, level surface.
2. If the engine is cold, start it and let it idle for 3－5 minutes. Turn the engine off. Wait 2－3 minutes for the oil to settle.
3. Remove the right side cover (page111).
4. Place a drain pan under the crankcase.
5. To drain the oil, remove the oil filler cap, engine oil drain bolt (1), and sealing washer (2).

FRONT, UNDER ENGINE



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

(cont'd)

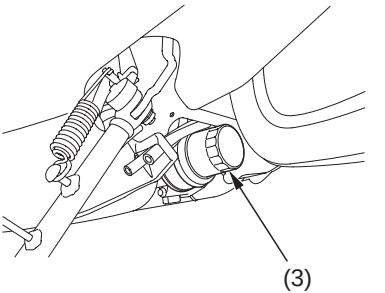
Install a New Oil Filter:

6. Remove the engine oil filter (3) with a filter wrench and let the remaining oil drain out. Discard the engine oil filter in an approved manner (page 191).
7. Pour the drained oil into a suitable container and dispose of it in an approved manner (page 191).

NOTICE

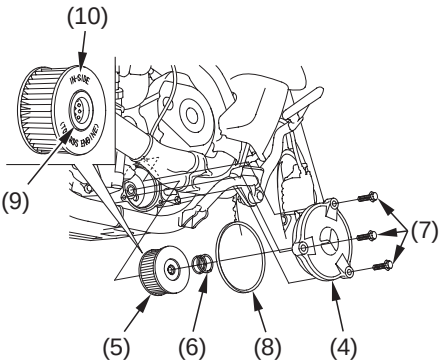
Improper disposal of drained fluids is harmful to the environment.

RIGHT SIDE



(3) engine oil filter

8. Remove the HFT oil filter cover (4), HFT oil filter (5) and spring (6) by removing the oil filter bolts (7).
9. Check that the oil filter cover O-ring (8) is in good condition and then install the spring and new oil filter. Use the Honda Genuine oil filter or an equivalent filter specified for your model. Other filters not specified for your model may not filter impurities properly.
10. Install the filter with the rubber seal (9) facing in, toward the engine. You will see ‘‘IN-SIDE’’ mark (10) on the filter body, near the seal.
11. Reinstall the oil filter cover, making sure the bolts are tightened securely. Oil filter bolt torque:
    7 lbf·ft (10 N·m , 1.0 kgf·m)

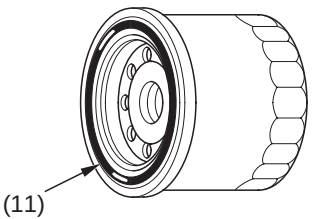


(4) HFT oil filter cover
(5) HFT oil filter
(6) spring
(7) oil filter bolts
(8) O-ring
(9) rubber seal
(10) IN-SIDE mark

(cont’d)

Use only the Honda Genuine HFT 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 transmission damage.

12. Apply a thin coat of engine oil to the rubber seal (11) of a new oil filter.



(11) rubber seal

13. Install the new engine oil filter and tighten it by hand.
14. Using an oil filter wrench attachment and a torque wrench, tighten the new engine oil filter to the specified torque:
    19 lbf·ft (26 N·m , 2.7 kgf·m)

15. Check the condition of the sealing washer on the engine oil drain bolt. Replace the washer every other time the oil is changed.
    Install the engine oil drain bolt and tighten it to the specified torque:
    18 lbf·ft (25 N·m , 2.5 kgf·m)

Add Engine Oil:

16. Fill the crankcase with the recommended oil (page 126), approximately:
    3.5 US qt (3.3 ℓ)
17. Install the oil filler cap.
18. Start the engine and let it idle for 3－5 minutes.
19. Stop the engine and wait 2－3 minutes.
20. Hold the motorcycle upright and check that the oil level is at the upper level mark on the dipstick (page129).
21. Check that there are no oil leaks.
22. Install the right under cowl (page 117).
23. Install the right side cover (page 111).

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

Coolant

Your motorcycle's liquid cooling system dissipates engine heat through the coolant jacket that surrounds the cylinder and cylinder head.

Maintaining the coolant will allow the cooling system to work properly and prevent freezing, overheating, and corrosion.

Coolant Recommendation

Use Pro Honda HP coolant or an equivalent high quality ethylene glycol antifreeze containing corrosion protection inhibitors specifically recommended for use in aluminum engines. Check the antifreeze container label.

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

NOTICE

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 water in this motorcycle. This coolant solution is recommended for most operating temperatures and provides good corrosion protection.

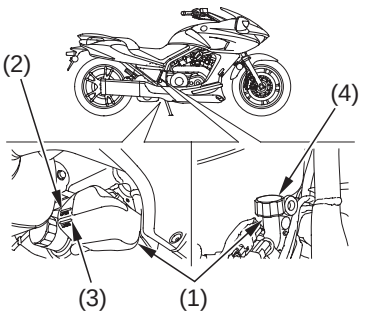
Decreasing the concentration of antifreeze to less than 40% will not provide proper corrosion protection.

Increasing the concentration of antifreeze is not recommended because it decreases cooling system performance. Higher concentrations of antifreeze (up to 60%) should only be used to provide additional protection against freezing. Check the cooling system frequently during freezing weather.

Checking & Adding Coolant

Refer to *Safety Precautions* on page 92 .

RIGHT SIDE



(1) reserve tank
(2) UPPER level mark
(3) LOWER level mark
(4) reserve tank cap

1. With the engine at normal operating temperature, check the coolant level in the reserve tank (1). It should be between the UPPER (2) and LOWER (3) level marks.
   If the reserve tank is empty, or if coolant loss is excessive, check for leaks and see your Honda dealer for repair.
2. Remove the right rear cowl (page 112).
3. Remove the reserve tank cap (4).
   Always add coolant to the reserve tank. Do not attempt to add coolant by removing the radiator cap.
4. Add coolant to the reserve tank as required to bring the coolant level to the UPPER level mark.
5. Install the reserve tank cap.
6. Install the right rear cowl (page 115).

Coolant Replacement

Refer to *Safety Precautions* on page 92 .

Coolant should be replaced by your Honda dealer, unless you have the proper tools and service data and are mechanically qualified. Refer to the official Honda Service Manual (page 248).

⚠ 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.

To properly dispose of drained coolant, refer to *You & the Environment,* page 191 .

NOTICE

Improper disposal of drained fluids is harmful to the environment.

Air Cleaner

Refer to *Safety Precautions* on page 92 .

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

Your motorcycle's air cleaner has very specific performance requirements. Use a new Honda Genuine air cleaner specified for your model or an air cleaner of equivalent quality.

NOTICE

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

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

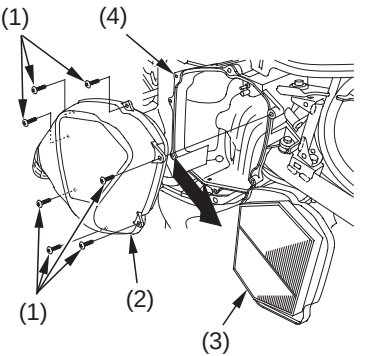
NOTICE

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

Replacement

1. Remove the left front cowl (page 118).
2. Remove the screws (1) and air cleaner housing cover (2).
3. Remove the air cleaner (3).
4. Discard the air cleaner.
   Thoroughly clean the inside of the air cleaner case (4).
5. Install a new air cleaner.
6. Install the removed parts in reverse order of removal.

LEFT SIDE



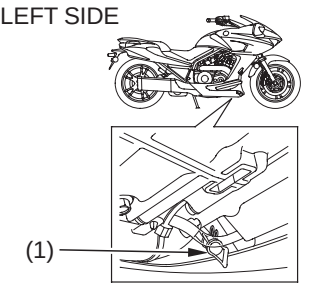
(1) screws
(2) air cleaner housing cover
(3) air cleaner
(4) air cleaner case

Crankcase Breather

Refer to *Safety Precautions* on page 92 .

Service the crankcase breather more frequently if your motorcycle is ridden in the rain or often at full throttle. Service the breather if you can see deposits in the transparent section of the drain tube.

Draining



(1) crankcase breather tube

1. Place a drain pan under the crankcase breather tube (1).
2. Remove the tube to drain the deposits in it.
3. Reinstall the crankcase breather tube.

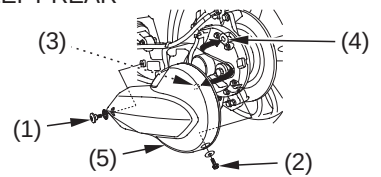
Oil Recommendation

type	hypoid gear oil
viscosity (weight)	SAE 80

Checking & Adding Oil

Refer to *Safety Precautions* on page 92 .

LEFT REAR

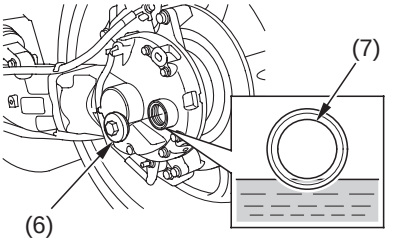


(1) bolt A
(2) bolt B
(3) prong
(4) grommet
(5) final gear cover

1. Place the motorcycle on its side stand on a firm, level surface.
2. Remove bolt A (1), bolt B (2) and washers.
3. Pull out the prong (3) from the grommet (4), and remove the final gear cover (5).

(cont'd)

4. Remove the oil filler cap (6).
5. Check the oil level. It should be flush with the lower edge of the oil filler hole (7).
6. If the level is low, check for leaks. Add the recommended oil through the oil filler hole until it reaches the lower edge of the opening.
7. Install the oil filler cap and tighten to the specified torque:
   9 lbf·ft (12 N·m , 1.2 kgf·m)
8. Install the final gear cover. Tighten the bolt A and B to the specified torque:
   7 lbf·ft (9 N·m , 0.9 kgf·m)



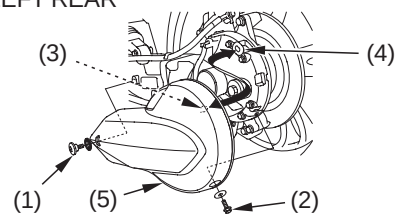
(6) oil filler cap
(7) oil filler inspection hole

Changing Oil

Refer to *Safety Precautions* on page 92 .

Change the oil with the final drive at normal operating temperature to assure complete and rapid draining.

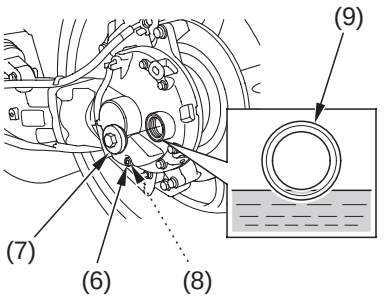
LEFT REAR



(1) bolt A
(2) bolt B
(3) prong
(4) grommet
(5) final gear cover

1. Place the motorcycle on its side stand on a firm, level surface.
2. Remove bolt A (1), bolt B (2) and washers.
3. Pull out the prong (3) from the grommet (4), and remove the final gear cover (5).
4. Place a drain pan under the oil drain bolt (6).
5. Remove the oil filler cap (7), oil drain bolt and sealing washer (8).
6. After the oil has completely drained, check that the sealing washer is in good condition. Reinstall the oil drain bolt with its sealing washer (or a new washer, if necessary) and tighten it to the specified torque:
   9 lbf·ft (12 N·m , 1.2 kgf·m)

(cont'd)



(6) oil drain bolt
(7) oil filler cap
(8) sealing washer
(9) oil filler inspection hole

7. Pour the drained oil into a suitable container and dispose of it in an approved manner (page 191).

NOTICE

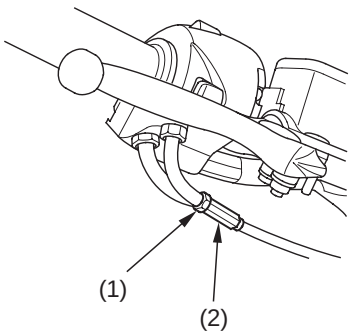
Improper disposal of drained fluids is harmful to the environment.

8. Fill the final drive with the recommended oil:
   5.4 US oz (160 cm^3)
   Make sure the final drive oil level is at the lower edge of the oil filler hole (9).
9. Install the oil filler cap and tighten to the specified torque:
   9 lbf·ft (12 N·m , 1.2 kgf·m)
10. Install the final gear cover. Tighten the bolt A and B to the specified torque:
    7 lbf·ft (9 N·m , 0.9 kgf·m)

Throttle Freeplay

Refer to *Safety Precautions* on page 92 .

RIGHT HANDLEBAR



(1) lock nut (2) adjuster

Inspection

Check freeplay at the throttle grip flange.

Freeplay:

1/16－3/16 in (2－4 mm)

If necessary, adjust to the specified range.

Adjustment

1. Loosen the lock nut (1).
2. Turn the adjuster (2).
3. Tighten the lock nut.
4. After adjustment, check for smooth rotation of the throttle grip from fully closed to fully open in all steering positions.

Throttle Inspection

Refer to *Safety Precautions* on page 92 .

1. Check that the throttle assembly is positioned properly and the securing bolts are tight.
2. Check for smooth rotation of the throttle from fully open to fully closed in all steering positions. If there is a problem, see your Honda dealer.

Spark Plug Recommendation

standard spark plug	SIMR8A9 (NGK)

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

NOTICE

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

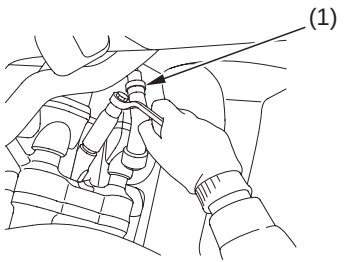
This motorcycle uses spark plugs that have an iridium coated center electrode.
Be sure to observe the following when servicing the spark plugs.

- Do not clean the spark plugs. If an electrode is contaminated with accumulated objects or dirt, replace the spark plug with a new one.
- To check the spark plug gap, use only a ‘‘wire-type feeler gauge.’’ To prevent damaging the iridium coating of the center electrode, never use a ‘‘leaf-type feeler gauge.’’
- Do not adjust the spark plug gap. If the gap is out of specification, replace the spark plug with a new one.

Spark Plug Inspection & Replacement

Refer to *Safety Precautions* on page 92 .

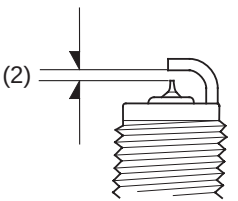
RIGHT SIDE



(1) spark plug cap

1. Clean any dirt from around the spark plug bases.
2. Disconnect the spark plug cap (1). Take care to avoid damaging the spark plug wire when disconnecting the cap.
3. Using a spark plug wrench, remove the spark plugs.
4. Inspect the electrode and center porcelain for deposits, corrosion, or carbon fouling. If the corrosion or deposits are heavy, replace the plug.
5. Make sure that the 0.90 mm wire-type feeler gauge cannot be inserted between the spark plug gap (2). If the gauge can be inserted into the gap, replace the plug with a new one.

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.



(2) spark plug gap

8. Tighten each 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. Take care to avoid pinching any cables or wires.

Suspension

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

The spring pre-load for your rear suspension system adjusts the amount of force required to begin compression of the spring.

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

Consider adjusting your rear suspension pre-load whenever you change your normal load, when adding or subtracting a passenger, cargo, or accessories, or when the road or riding conditions change.

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

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

Rear Suspension Adjustment

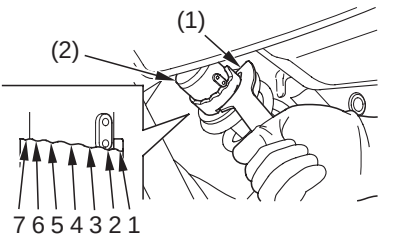
The rear suspension can be adjusted for rider (and passenger) weight and riding conditions by changing the spring pre-load.

To adjust, use an appropriable pin spanner or see your Honda dealer.

Do not attempt to disassemble, service, or dispose of the damper; see your Honda dealer. The instructions found in this owner's manual are limited to adjustments of the shock assembly only.

Rear Suspension Spring Pre-load

Refer to *Safety Precautions* on page 92 .



(1) pin spanner
(2) shock absorber

The spring pre-load adjuster has 7 positions for different load or riding conditions.

Use a pin spanner (1) to adjust the rear shock spring pre-load.

Position 1: for a light load and smooth road conditions.
Position 2: standard position.
Positions 3 to 7: for when the motorcycle is more heavily loaded. (Also increase spring pre-load for stiffer rear suspension.)

Always adjust the shock absorber position in sequence (1-2-3-4-5-6-7 or 7-6-5-4-3-2-1). Attempting to adjust directly from 1 to 7 or 7 to 1 may damage the shock absorber.

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

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

Frequently inspect the system to ensure there are no fluid leaks. Periodically inspect the brake fluid level and the brake pads for wear.

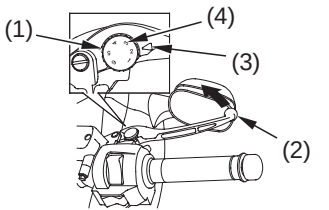
If the brake lever or brake pedal freeplay does not feel within the normal range while riding, check the brake pads for wear (page 159). Worn pads should be replaced. If the pads are not worn beyond the recommended limit, there is probably air in the brake system. See your Honda dealer to have the air bled from the system.

Front Brake Lever Adjustment

Refer to *Safety Precautions* on page 92 .

The distance between the tip of the brake lever and the grip may be adjusted.

RIGHT HANDLEBAR



(1) adjuster dial
(2) brake lever
(3) index mark
(4) numbers

1. Turn the adjuster dial (1) while pushing the brake lever (2) forward.
2. Align the index mark (3) on the brake lever with the numbers (4) on the adjuster dial.
3. Apply the brake, release it, then spin the wheel and check that it rotates freely. Repeat this procedure several times.

Brake Fluid Recommendation

brake fluid	Honda DOT 4 Brake Fluid

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

Fluid Level Inspection

Refer to *Safety Precautions* on page 92 .

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

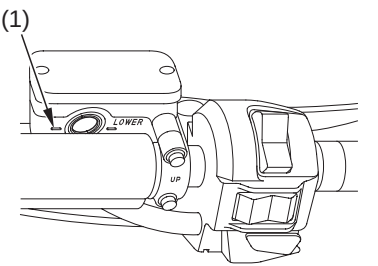
Do not add or replace brake fluid, except in an emergency. If you do add fluid, have your Honda dealer check the system as soon as possible.

NOTICE

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

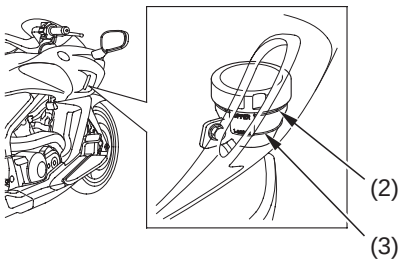
Wipe up spills immediately. Avoid brake fluid contact with skin or eyes. If it comes in contact with your eyes, wash them out with clean water and immediately call a doctor. If it comes in contact with your skin, wash with clean water and, if necessary, call a doctor.

RIGHT HANDLEBAR
(front brake)



(1) LOWER level mark

RIGHT SIDE
(rear brake)



(2) UPPER level mark
(3) LOWER level mark

1. Place your motorcycle in an upright position on a firm, level surface.

2. Check the fluid level.
   Front : It should be above the LOWER level mark (1).
   Rear : It should be between the UPPER (2) and LOWER level (3) marks.
   If the level is at or below the LOWER level mark, check the brake pads for wear (page 159).

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

Other Inspections

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

Brake Pad Wear

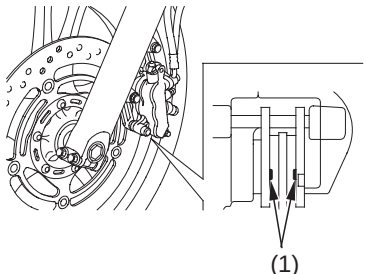
Refer to *Safety Precautions* on page 92 .

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 101).

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

Front Brake

LEFT FRONT (Right side similar)

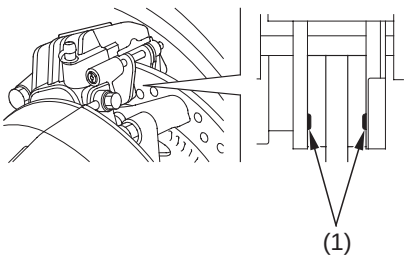


(1) cutouts

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.

Rear Brake

LEFT REAR



(1) cutouts

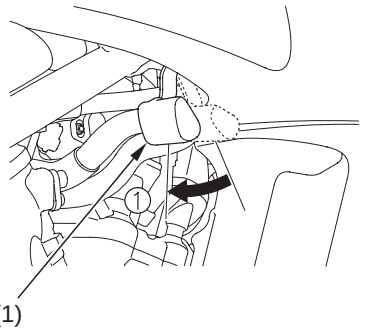
Check the cutout (1) in each pad. If either pad is worn to the cutout, replace both pads as a set. See your Honda dealer for this service.

Parking Brake

Stop the engine and push your motorcycle while fully pulling the parking brake lever (1) to check the efficacy of the parking brake.

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

RIGHT SIDE



(1) parking brake lever

Tires

To safely operate your motorcycle, your tires must be the proper type and size, in good condition with adequate tread, and correctly inflated for the load you are carrying.

⚠ WARNING

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

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

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

Air Pressure

Refer to *Safety Precautions* on page 92 .

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

We recommend that you visually check your tires before every ride and use an air pressure gauge to measure the air pressure at least once a month or any time you think the tires might be low. Even tires that are in good condition may lose one to two psi per month if not checked and adjusted regularly.

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

Always check air pressure when your tires are ''cold'', after the motorcycle has been parked for at least three hours. If you check air pressure when your tires are ''warm'' — even if your motorcycle has only been ridden for a few miles — the readings will be higher. If you let air out of warm tires to match the recommended cold pressures, the tires will be underinflated.

The recommended ''cold'' tire pressures are:

front	33 psi (225 kPa , 2.25 kgf/cm^2)
rear	36 psi (250 kPa , 2.50 kgf/cm^2)

Inspection

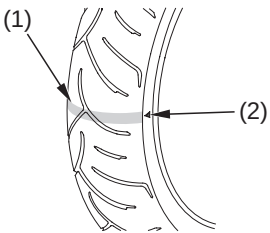
Refer to *Safety Precautions* on page 92 .

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

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

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

Tread Wear



(1) wear indicator
(2) wear indicator location mark

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

front	0.06 in (1.5 mm)
rear	0.08 in (2.0 mm)

If the wear indicators are visible, replace the tire immediately as it is no longer safe.

Tire Service Life

The service life of your tires is dependent on many factors, including, but not limited to, riding habits, road conditions, vehicle loading, tire pressure, maintenance history, speed, and environmental conditions (even when the tires are not in use).
In addition to your regular inspections and tire pressure maintenance, it is recommended that you have annual inspections performed once the tires reach 5 years old. It is also recommended that all tires be removed from service after 10 years from the date of manufacture, regardless of their condition or state of wear.
The last four digits of the TIN (tire identification number) (1) are found on the sidewall of the tire, and indicate the date of manufacture.

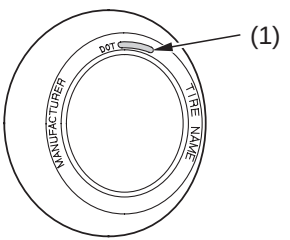
Tire Identification Number (TIN)
The tire identification number (TIN) is a group of numbers and letters that look like the following example. The TIN is located on the sidewall of the tire.

DOT $\underset{(2)}{\times\times\times\times}$ $\underset{(3)}{\times\times\times\times}$ $\underset{(4)}{22\ 07}$

(cont'd)

DOT − This indicates that the tire meets all requirements of the U.S. Department of Transportation.
(2) × × × × − Factory code
(3) × × × × − Tire type code
(4) 22 07 − Date of manufacture
Year
Week

TIRE LABELING EXAMPLE



(1) tire identification number (TIN)

Tire Repair

Refer to *Safety Precautions* on page 92 .

We strongly recommend that you replace, not repair, any tire that is punctured or damaged. As discussed below, a tire that is repaired, either temporarily or permanently, will have lower speed and performance limits than a new or undamaged tire.

A temporary repair can sometimes be made in an emergency situation. However, since a temporary repair may not hold, you must ride very slowly, preferably without any cargo or passenger, and have the tire replaced or permanently repaired as soon as possible.
(For more information on temporary repairs, see *If You Have a Flat Tire,* page 200 .)

A permanent repair, such as an internal plug patch, can be made if a tire has only a small puncture in the tread area. With such a repair, you should not exceed 50 mph (80 km/h) for the first 24 hours, or 80 mph (130 km/h) at any time thereafter. In addition, you may not be able to safely carry as much weight. If you choose to have a tire repaired, be sure the repair work is performed by a professional and that the wheel is balanced before you ride.

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

Tire Replacement

Refer to *Safety Precautions* on page 92 .

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

When replacing, use the original equipment tires or equivalent tires of the same size, construction, speed rating, and load range as the originals.

⚠ WARNING

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

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

The recommended tires for your motorcycle are:

front	130/70ZR17M/C (62W) DUNLOP ROADSMART CQ BRIDGESTONE BT021F G
rear	190/50ZR17M/C (73W) DUNLOP ROADSMART K BRIDGESTONE BT021R G
type	radial-ply, tubeless

Whenever you replace a tire, remember:

- Have the wheel balanced after the tire is installed.
- Have the tire replaced by your Honda dealer if possible.

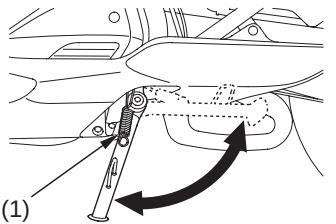
If you have a tire professionally replaced at a non-Honda facility, we recommend that you have the work checked by your Honda dealer.

Important Safety Reminders

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

Refer to *Safety Precautions* on page 92 .

LEFT SIDE



(1) side stand spring

- Check that the side stand assembly is working properly. If the side stand is stiff or squeaky, clean the pivot area and lubricate the pivot bolt with clean grease.
- Check the side stand spring (1) for damage or loss of tension.
- Check the side stand ignition cut-off system:
  1. Sit astride the motorcycle; put the side stand up.
  2. Start the engine and press and hold the D (drive) side of N-D shift switch to switch the transmission into D mode.
  3. Lower the side stand.

  The engine should stop as you lower the side stand. If the engine doesn't stop, see your Honda dealer for service.

Battery

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

NOTICE

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

Electrical accessories use current from the battery, even when the ignition is OFF. Limited operation also allows the battery to discharge. If you have electrical accessories on your motorcycle or do not ride frequently, we recommend that you charge the battery frequently (see *Battery Charging,* page 176).

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

If you plan to store your motorcycle, see *Battery Storage,* page 173 .

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

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

Battery Storage

Refer to *Safety Precautions* on page 92 .

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

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

You will get the best storage results from removing the battery and slow (trickle) charging it every 30 days (see *Battery Charging,* page 176).

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

⚠ WARNING

The battery gives off explosive hydrogen gas during normal operation.

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

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

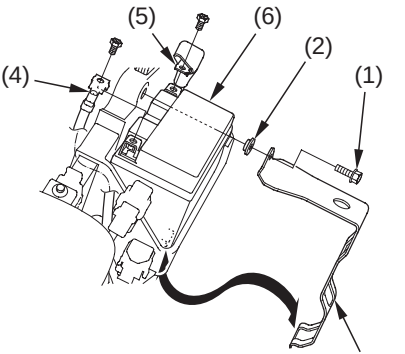
Battery

The battery is located in the battery box on the left side, below the rear seat.

Removal

1. Make sure the ignition switch is OFF.
2. Remove the rear seat (page109).
3. Remove the left rear cowl (page 112).
4. Remove the bolt (1), collar (2) and battery holder (3).
5. Disconnect the negative (−) terminal lead (4) from the battery first, then disconnect the positive (+) terminal lead (5).
6. Pull the battery (6) out of the battery box.

UNDER REAR SEAT



(1) bolt
(2) collar
(3) battery holder
(4) negative (−) terminal lead
(5) positive (+) terminal lead
(6) battery

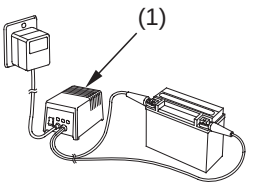
7. Charge the battery (see following section), unless you have been riding regularly.
8. Store your battery in an easy-to-reach location off the floor, in an area protected from freezing temperatures and direct sunlight.
9. Clean the battery box after removing the battery for storage. Dry the battery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

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.

Battery Charging

Refer to *Safety Precautions* on page 92 .



(1) “trickle” charger

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

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

Avoid using an automotive-type battery charger. An automotive charger can overheat a motorcycle battery and cause permanent damage.

Frequent cleaning and polishing will keep your Honda looking newer longer. Frequent cleaning also identifies you as an owner who values your motorcycle. A clean motorcycle is also easier to inspect and service.

General Recommendations

Refer to *Safety Precautions* on page 92 .

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

(cont'd)

- We recommend the use of a garden hose to wash your motorcycle. High pressure washers (like those at coin-operated car washes) can damage certain parts of your motorcycle.

NOTICE

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

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

Washing Your Motorcycle with a Mild Detergent

Refer to *Safety Precautions* on page 92 .

1. Rinse your motorcycle thoroughly with cool water to remove loose dirt.
2. Fill a bucket with cool water. Mix in a mild, neutral detergent, such as dish washing liquid or a product made especially for washing motorcycles or automobiles.
3. Wash your motorcycle with a sponge or a soft towel. As you wash, check for heavy grime. If necessary, use a mild cleaner/degreaser to remove the grime.
4. After washing, rinse your motorcycle thoroughly with plenty of clean water to remove any residue. Detergent residue can corrode alloy parts.
5. Dry your motorcycle with a chamois or a soft towel. Leaving water on the surface to air dry can cause dulling and water spots. As you dry, inspect for chips and scratches.
6. Start the engine and let it idle for several minutes. The engine heat will help dry moist areas.

(cont'd)

7. As a precaution, ride your motorcycle at a slow speed and apply the brakes several times. This will help dry the brakes and restore normal braking performance.

If the inside of the headlight lens appears clouded immediately after washing, it should clear after a few minutes of riding.

Spray Cleaning Your Motorcycle

Refer to *Safety Precautions* on page 92 .

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

Suggestions for using spray cleaner(s) follow:

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

Painted Aluminum Wheel Maintenance

Refer to *Safety Precautions* on page 92 .

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

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

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

Clean the Matte Painted Surface

Refer to *Safety Precautions* on page 92 .

Use a soft cloth or sponge, plenty of water, and a mild detergent to clean the matte paint. Dry with a soft, clean cloth.

Do not use polishing compounds or wax containing polishing compounds. These can damage or discolor the paint.

To keep your Honda looking new, clean and polish it frequently.

Exhaust Pipe and Muffler Maintenance

Refer to *Safety Precautions* on page 92 .

The exhaust pipe and muffler are stainless steel but may become stained by mud or dust.

To remove mud or dust, use a wet sponge and a liquid kitchen abrasive, then rinse well with clean water. Dry with chamois or a soft towel.

If necessary, remove heat stains by using a commercially available fine texture compound. Then rinse by the same manner as removing mud or dust.

Finishing Touches

Refer to *Safety Precautions* on page 92 .

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

If a surface on your motorcycle is chipped or scratched, your Honda dealer has touch-up paint to match your motorcycle's color. Be sure to use your motorcycle's color code (page 228) when you buy touch-up paint.

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

Tips

Here's a few helpful tips on how to store and transport your Honda, and how to be an environmentally responsible motorcycle owner.

Storing Your Honda

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

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

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

Preparation for Storage

Refer to *Safety Precautions* on page 92 .

This procedure requires a means for draining and disposing of drained fuel (page 191).

1. Change the engine oil and filter (page 130).
2. Make sure the cooling system is filled with a 50/50% antifreeze solution (page 136).
3. Fill the fuel tank. Make sure the fuel fill cap is properly installed.

4. To prevent rusting in the cylinders, perform the following:
   - Remove the spark plug caps from the spark plugs. Using tape or string, secure the caps to any convenient plastic body part so that they are positioned away from the spark plugs.
   - Remove the spark plugs from the engine and store them in a safe place. Do not connect the spark plugs to the spark plug caps.
   - Pour a tablespoon (15－20 cc) of clean engine oil into each cylinder and cover the spark plug holes with a piece of cloth.
   - With the engine stop switch in the RUN position, press the start button several times to crank the engine and distribute the oil.
   - Reinstall the spark plugs and spark plug caps.

(cont'd)

5. Remove the battery and charge it fully. Store it in an area protected from freezing temperatures and direct sunlight. Slow charge the battery (page 176) once a month.
6. Wash and dry your motorcycle. Wax all painted surfaces (except matte painted surfaces). Apply rust-inhibiting oil to the chrome pieces.
7. Inflate the tires to their recommended pressures (page 162).
8. Store your motorcycle in an unheated area, free of dampness, away from sunlight, with a minimum of daily temperature variation.
9. Place your motorcycle on blocks to lift both tires off the floor.
10. Cover your motorcycle with a porous material. Avoid using plastic or similar non-breathing, coated materials that restrict air flow and allow heat and moisture to accumulate.

Removal from Storage

Refer to *Safety Precautions* on page 92 .

1. Uncover and clean your motorcycle.
2. If your motorcycle has been stored for more than four months — change the engine oil (page 130).
3. If your motorcycle has been stored for more than two months — ask your Honda dealer to drain and replace the fuel.
4. Charge the battery (page 176) as required. Install the battery.
5. Perform a pre-ride inspection (page 57), then test-ride your motorcycle at low speeds.

Transporting Your Motorcycle

If your motorcycle needs to be transported, it should be carried on a motorcycle trailer, or a truck or trailer with a flatbed area. Do not tow your motorcycle, as towing can seriously damage the transmission.

When contacting a towing or transporting service, be sure to ask if they have a flatbed area, a loading ramp or power ramp to safely lift the motorcycle, and motorcycle tie-down straps.

Owning and riding a motorcycle can be enjoyable, but you must do your part to protect nature.

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

- **Choose Sensible Cleaners.** Use a biodegradable detergent when you wash your motorcycle. Avoid aerosol spray cleaners that contain chlorofluorocarbons (CFCs) which damage the atmosphere's protective ozone layer. Don't throw cleaning solvents away; see the following guidelines for proper disposal.
- **Recycle Wastes.** It's illegal and thoughtless to put used engine oil in the trash, down a drain, or on the ground. Used oil, gasoline, coolant, and cleaning solvents contain poisons that can hurt refuse workers and contaminate our drinking water, lakes, rivers, and oceans. Before changing your oil, make sure you have the proper containers. Put oil and other toxic wastes in separate sealed containers and take them to a recycling center. Call your local or state office of public works or environmental services to find a recycling center in your area, and to get instructions on how to dispose of non-recyclable wastes.

Taking Care of the Unexpected

This section discusses the more common problems that can occur with your motorcycle while you're riding. It tells you how to evaluate each problem and what actions you can take to try to resume riding. If the problem cannot be safely solved, this section also gives instructions on the proper way to have your motorcycle transported.

For information about transporting your motorcycle, see page 190 .

General Guidelines

Keeping your motorcycle well-maintained is the best way to reduce the possibility of having a problem on the road.

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

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

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

Additional recommendations for specific problems follow.

If Your Engine Quits or Won't Start

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

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

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

SYMPTOM: **Starter motor doesn't operate.**	
POSSIBLE CAUSE	WHAT TO DO
ignition switch OFF	Turn the ignition switch ON.
engine stop switch OFF	Turn the engine stop switch to RUN.
blown fuse	Replace with a new fuse of the same rating (page 216).
battery lead loose	Tighten the battery lead.
low (or dead) battery	Charge the battery (page 176). If charging doesn't help, see your Honda dealer.
faulty starter motor	If all possible causes are negative, the starter motor may be faulty. See your Honda dealer.

SYMPTOM: **Starter motor works, but the engine won't start.**	
POSSIBLE CAUSE	WHAT TO DO
out of fuel	Fill the fuel tank.
flooded engine	See *Flooded Engine* (page 67).
loose or unconnected spark plug caps	Install the spark plug caps securely. If the engine still won't start, see your Honda dealer.
loose battery cables	Tighten the battery terminal bolts.
weak battery	Charge the battery (page 176). If charging doesn't help, see your Honda dealer.

If Your Engine Quits or Won't Start

SYMPTOM: **Engine starts, but switching neutral to D mode cannot be done.**	
POSSIBLE CAUSE	WHAT TO DO
HFT failure	Check the shift indicator. Refer to *If There Is a Failure In HFT*, page 52 .

SYMPTOM: **Engine starts, but runs poorly.**	
POSSIBLE CAUSE	WHAT TO DO
idles roughly, too fast, stalls	See your Honda dealer.
overheating	Check the high coolant temperature indicator. Refer to *If Your Engine Overheats,* page 212 .
low oil pressure	Check the low oil level/pressure indicator. Refer to *If the Low Oil Level/Pressure Indicator Lights,* page 214 .
runs erratically, misfires	May damage catalytic converter. See your Honda dealer.
blubbers (rich fuel mixture)	See your Honda dealer.

SYMPTOM: **Engine starts, but runs poorly (cont'd).**	
POSSIBLE CAUSE	WHAT TO DO
sooty exhaust (rich fuel mixture)	See your Honda dealer.
detonates or pings under load	If applicable, switch to the recommended octane gasoline (page 122) or change your brand of gasoline. If the problem persists, see your Honda dealer.
afterfires (backfires)	May damage catalytic converter. See your Honda dealer.
pre-ignition (runs on after ignition switched OFF)	May damage catalytic converter. See your Honda dealer.

If You Have a Flat Tire

A flat tire is always unwelcome, especially if you are far from help. If you think you are losing air, or you hit a pothole or hard object, pull safely to the side of the road so you can inspect the tires and assess the situation. (Be sure to park on a firm, level surface and use the side stand for support.) You should examine the tire treads and sidewalls for foreign objects or damage. If you find a tire that has been punctured or damaged, you have two options.

Option 1:
Have Your Motorcycle Transported
If a tire has a major puncture or a cut in the tread or sidewall, or the bead has come loose from the rim, there is probably not much you can do except have your motorcycle transported to a Honda dealer or other qualified service facility. Even with a simple puncture, this may be the safest and least troublesome solution. For transporting instructions, see page 190.

Option 2:
Make a Temporary Roadside Repair
If a tire has only a minor nail puncture and is not completely flat, you may be able to make an emergency repair that could allow you to continue riding to where you can get the tire replaced or permanently repaired.

⚠ WARNING

Riding your motorcycle with a temporary tire repair can be risky. If the temporary repair fails, you can crash and be seriously injured or killed.

If you must ride with a temporary tire repair, ride slowly and carefully and do not exceed 30 mph (50 km/h) until the tire is permanently repaired or replaced.

Due to the uncertainty of any temporary repair, you should ride slowly (not over 30 mph, 50 km/h) and carefully (preferably without a passenger or cargo) until the tire is replaced or permanently repaired. Stop frequently and check the air pressure. If the tire is losing pressure, it may be unsafe to continue riding. As the tire gets low, it will affect the handling of your motorcycle (especially with a passenger and cargo), and it may overheat and blow out.

Types of Temporary Repairs

The following types of temporary repairs generally require a source of air to inflate the tire. Possible sources include CO_2 cartridges or cans of compressed air designed to inflate a tire.

- **Inflate the tire:** Tubeless tires have some self-sealing ability if they are punctured and the result is usually just a slow leak. If this is the case, you can try inflating the tire to see if it will hold air pressure. If you can see a nail or other object embedded in the tire tread, do not remove it at this time.
- **Plug the hole:** The idea here is to do something to temporarily stop the leak. If you have a tubeless tire repair kit, you can pull out the nail and try inserting an external plug in the puncture. Follow the instructions that came with the repair kit and be sure to inflate the tire to the correct pressure.

Should You Repair or Replace a Tire?

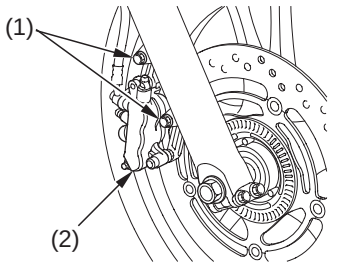
We strongly recommend that you replace, not permanently repair, any tire that is punctured or damaged, even if the tire has only a minor puncture. For a full discussion of repairs and replacement, see page 167.

Emergency Front Wheel Removal/Installation

Refer to *Safety Precautions* on page 92 .

We recommend wheel removal be done only by your Honda dealer or another qualified mechanic. Do not attempt to remove the wheel on your own. Wheel removal requires mechanical skill and professional tools.

RIGHT SIDE



(1) caliper fixing bolts
(2) brake caliper

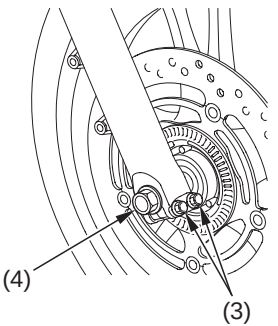
Removal

1. Park your motorcycle on a firm, level surface.

(cont'd)

2. Support the motorcycle securely and raise the front wheel off the ground using a safety stand or a hoist.
3. Remove the caliper fixing bolts (1) and remove the right and left brake calipers (2) from the fork legs.
   - To avoid damage to the brake hose during removal, support the caliper assembly so that it doesn't hang from the hose. Do not twist the brake hose.
   - Avoid getting grease, oil, or dirt on the disc or pad surfaces. Any contamination can cause poor brake performance or rapid pad wear after reassembly.
4. Loosen the right and left axle pinch bolts (3) and remove the front axle bolt (4).

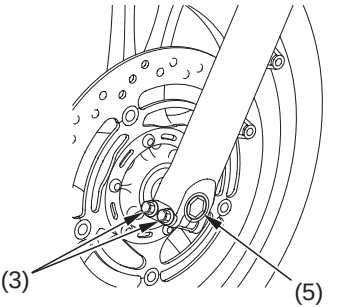
RIGHT FRONT



(3) axle pinch bolts
(4) front axle bolt

5. Remove the front axle shaft (5), wheel and side collars.
   - Avoid pressing the brake lever when the wheel is off the motorcycle. This will force the caliper pistons out of the cylinders. The result will be loss of brake fluid. If this occurs, the brake system will require service. See your Honda dealer for this service.

LEFT FRONT

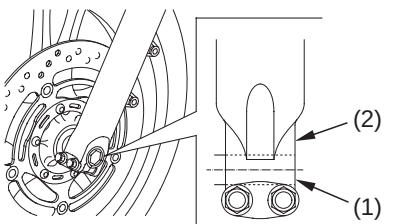


(3) axle pinch bolts
(5) front axle shaft

Installation

1. Install the side collars and position the wheel between the fork legs. Insert the front axle shaft from the left side, through the left fork leg and wheel hub.
2. Align the end of axle shaft (1) with the surface of fork leg (2).

LEFT FRONT

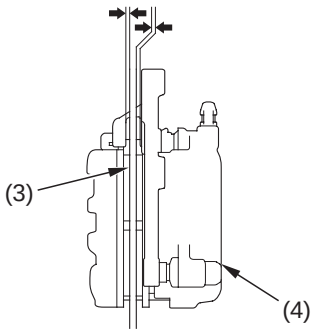


(1) end of axle shaft
(2) surface of fork leg

3. Tighten the axle pinch bolts on the left fork leg to the specified torque:
   16 lbf·ft (22 N·m , 2.2 kgf·m)
4. Tighten the front axle bolt to the specified torque:
   44 lbf·ft (59 N·m , 6.0 kgf·m)
5. Install the right and left brake calipers onto the fork legs.
   To avoid damaging the brake pads, carefully fit the brake disc (3) between the pads.
6. Install the caliper fixing bolts and tighten to the specified torque:
   22 lbf·ft (31 N·m , 3.1 kgf·m)

7. Operate the front brake and pump the fork several times. Check for free wheel rotation after the brake is released. Recheck the wheel if the brake drags or the wheel does not rotate freely.
8. If the clearances between each surface of the brake disc and the brake caliper body (4) (not the brake pads) are symmetrical, follow next step.
   If the clearances are not symmetrical, loosen the left axle pinch bolts and pull the left fork outward or push inward to adjust the clearance. Then follow the next step.
9. Tighten the axle pinch bolts on the right fork leg to the specified torque:
   16 lbf·ft (22 N·m , 2.2 kgf·m)

- Visually check that the clearances between each surface of the brake disc and the brake caliper body (not the brake pads) are symmetrical.



(3) brake disc (4) brake caliper body

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

Emergency Rear Wheel Removal/Installation

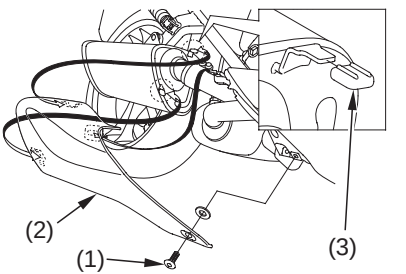
Refer to *Safety Precautions* on page 92 .

We recommend wheel removal be done only by your Honda dealer or another qualified mechanic. Do not attempt to remove the wheel on your own. Wheel removal requires mechanical skill and professional tools.

Removal

1. Park your motorcycle on a firm, level surface.
2. To remove the muffler cover (2), remove the muffler cover bolt (1) and washer, and pull out the muffler cover from the prongs.

RIGHT REAR

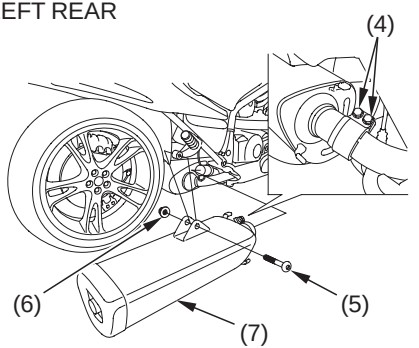


(1) muffler cover bolt
(2) muffler cover
(3) rubber cap

(cont'd)

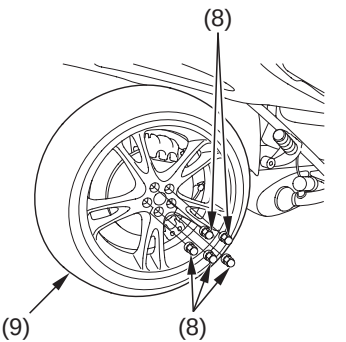
3. Loosen the muffler band bolts (4), and remove the muffler bracket bolt (5) and nut (6).
4. Remove the muffler (7).

LEFT REAR



(4) muffler band bolts
(5) muffler bracket bolt
(6) nut
(7) muffler

5. Support the motorcycle securely, raise the rear wheel off the ground.
6. Remove the rear wheel nuts (8).
7. Remove the rear wheel (9) slowly.



(8) rear wheel nuts
(9) rear wheel

Installation

1. Position the rear wheel and install the rear wheel nuts.
   - Avoid getting grease, oil, or dirt on the disc or pad surfaces. Any contamination can cause poor brake performance or rapid pad wear after reassembly.
2. Tighten the rear wheel nuts securely in the same crisscross pattern to the specified torque:
   80 lbf·ft (108 N·m , 11.0 kgf·m)
3. After installing the wheel, apply the brake several times and then check if the wheel rotates freely. Recheck the wheel if the brake drags or if the wheel does not rotate freely.
4. Operate the brake pedal and check the brake operation.
5. Inspect the brake system (page 157).
6. Reinstall the muffler and muffler cover.
   - Before installing the muffler, replace the muffler gasket with a new gasket.
   - If either of the rubber caps came away from the prongs when removing the muffler cover, re-attach them.

   Tighten and torque the nuts and bolts to the specified torque:
   Muffler bracket bolt:
   15 lbf·ft (21 N·m , 2.1 kgf·m)
   Muffler band bolt:
   13 lbf·ft (17 N·m , 1.7 kgf·m)
   Muffler cover bolt:
   7 lbf·ft (9 N·m , 0.9 kgf·m)

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

If Your Engine Overheats

Normally, the temperature of the coolant in the cooling system will rise to a level about midway between cold and boiling. Hot weather may cause the temperature to rise higher than normal. So will temporary stress such as climbing a hill. If you're stuck in stop-and-go traffic, the temperature may climb some, but the radiator fan is designed to prevent overheating. Be aware of these variations.

If the high coolant temperature indicator (page 20) comes on for no apparent reason, pull safely to the side of the road. If possible, park in a shady area.

NOTICE

Continuing to ride with an overheated engine can cause serious engine damage.

- A steaming engine indicates a coolant leak. Shut the engine off and wait until the steaming stops. Look for a leak, but don't touch the engine or radiator system. Let everything cool off first.
- If there's no obvious problem, leave the engine on so the fan and coolant circulating system can continue working. Monitor the high coolant temperature indicator. The indicator may turn off after a brief stop with no load on the engine.

- Check the radiator fan.
  If the fan is not working, turn the engine off. Open the fuse box (page 219) and check the radiator fan fuse. If the fuse is blown, replace it with the proper (same rating) spare fuse.
  Start the engine. If the high coolant temperature indicator comes on and stays on, turn the engine off.
  If the radiator fan is working, visually check the coolant level in the reserve tank, located just behind the right side frame. It isn't necessary to touch the radiator system.
- If the reserve tank is low or empty, don't ride without adding coolant (page 137).
  After adding coolant, turn the engine on and check the high coolant temperature indicator.
  If the indicator doesn't turn off, do not ride. The engine needs repair. Transport your motorcycle to a Honda dealer (page 190).
  If the temperature drops to normal, check the coolant level. If it has gone down, add more coolant.

If you are able to resume riding, continue to monitor the high coolant temperature indicator frequently.

If there's a mild leak, you can ride for awhile, carefully watching the high coolant temperature indicator. Be prepared to stop and add more coolant or water. If the leak is bad, transport your motorcycle to a Honda dealer (page 190).

If the Low Oil Level/Pressure Indicator Lights or Flashes

If the low oil level/pressure indicator (1) comes on while you're riding, don't ignore it. Pull safely to the side of the road. Stop the engine as soon as it's safe to do so.

The indicator has two lighting patterns.

Normally, it will only light momentarily when you turn the ignition switch ON. Occasionally, it may flicker at or near idling speed.

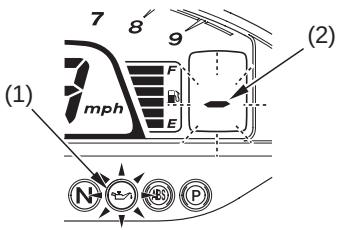
If the indicator lights, it may be caused by a low oil pressure.

Moreover, if the shift indicator changes to the blinking ''—'' icon (2), it may be caused by a lower oil pressure. When this happens, the transmission automatically shifts to neutral (neutral indicator does not light).

If the indicator comes on, see your Honda dealer as soon as possible.

NOTICE

Continuing to ride with low oil pressure can cause serious engine and transmission damage.



(1) low oil level/pressure indicator
(2) "—" icon

If the Low Oil Level/Pressure Indicator Lights or Flashes

If the indicator flashes, it may be caused by a low oil level.

- Check for an oil leak.
- Then check the oil level. If necessary, add the recommended oil (page 125) to the upper level mark. If you must leave your motorcycle to get oil, secure it as much as possible.
- After adding oil, start the engine, and check that the low oil level/pressure indicator goes off. Check for a possible leak.
- Make sure that the motorcycle is standing upright on firm level ground when you turn ON the ignition switch. If the motorcycle is on an incline, the indicator stays on after starting the engine.

If the indicator stays on even if the engine oil level is not low or after more engine oil is added, contact your Honda dealer as soon as possible.

If a Fuse Blows

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

If something electrical on your motorcycle stops working, the first thing you should check for is a blown fuse.
Determine from the chart on the circuit fuse box cover which fuse or fuses control that component. Check those fuses first, but check all the fuses before looking elsewhere for another possible cause of the problem. Replace any blown fuses and check component operation.

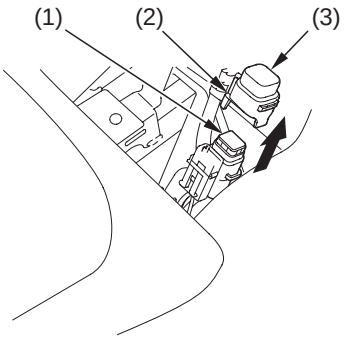
- The main fuse is located under the rear seat.
- The HFT fuse is located under the rear seat.
- The circuit fuse box (including spare fuses) is located under the front seat.

Recommended Fuses

main fuse	40A
HFT fuse	10A
other fuses	10A, 20A, 30A

1. To prevent an accidental short circuit, turn the ignition switch OFF before checking or replacing the fuses.
2. Remove the rear seat (page109).

UNDER REAR SEAT

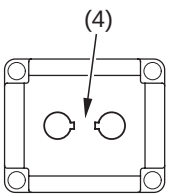


(1) main fuse
(2) tab
(3) fuse box cover

Main Fuse Access:

3. To access the main fuse (1), release the tab (2), then remove the fuse box cover (3).
4. Pull the main fuse out.
   If it is blown (4), install a new main fuse.

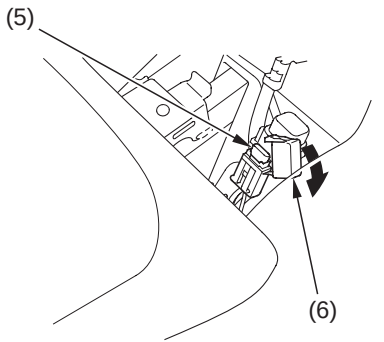
MAIN FUSE



(4) blown fuse

(cont'd)

UNDER REAR SEAT

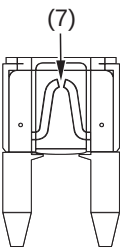


(5) HFT fuse
(6) fuse box cover

HFT Fuse Access:

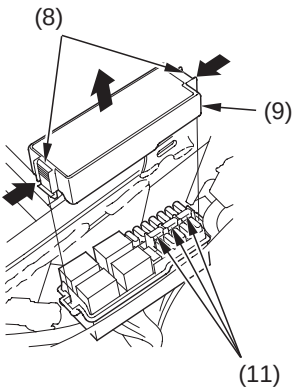
5. To access the HFT fuse (5), open the fuse box cover (6).
6. Pull the HFT fuse out. If it is blown (7), install the spare HFT fuse.
   The spare fuse is located in the fuse box (page 219).

HFT FUSE



(7) blown fuse

UNDER FRONT SEAT



(8) tabs
(9) fuse box cover
(11) spare fuses

Circuit Fuse Access:

7. Remove the front seat (page110).
8. Release the tabs (8), then remove the fuse box cover (9).
9. To check or replace a circuit fuse, pull the old fuse out. Look for a burned wire inside the fuse. If the fuse is blown (10), replace it with a spare fuses (11) of the same rating.

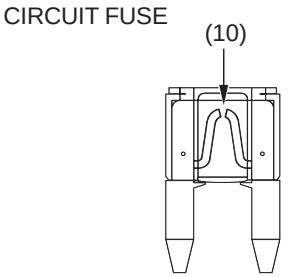
If you do not have a replacement fuse with the proper rating for the circuit, install one with a lower rating.

NOTICE

Replacing a fuse with one that has a higher rating greatly increases the chance of damage to the electrical system.

(cont'd)

If a Fuse Blows



(10) blown fuse

10. Install the fuse box cover.
11. Install the front seat.
12. Install the rear seat.

If you do not have a spare fuse and you cannot ride the motorcycle without fixing the problem, take a fuse of the same rating or a lower rating from one of the other circuits that you can do without temporarily.

If you replace a blown fuse with a spare fuse that has a lower rating, replace the fuse with the correct rating as soon as you can. Also remember to replace any spare fuses that were installed.

If the replacement fuse of the same rating burns out in a short time, there is probably a serious electrical problem on your motorcycle. Leave the blown fuse in that circuit and have your motorcycle checked by your Honda dealer.

Personal safety is your first priority after a crash. If you or anyone else has been injured, take time to assess the severity of the injuries and whether it is safe to continue riding. Call for emergency assistance if needed. Also follow applicable laws and regulations if another person or vehicle is involved in the crash.

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

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

If your motorcycle cannot be ridden, see *Transporting Your Motorcycle,* page 190.

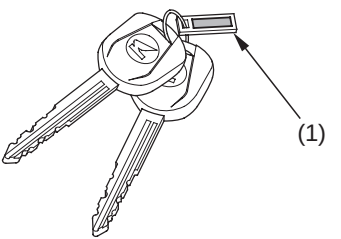
If You Lose Your Key

You should receive a key number plate (1) with your keys. Store this plate in a safe place.

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

A lost key won't be a problem if you take preventative action. Store one duplicate key in a safe place at home and carry a second duplicate in your wallet.

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



(1) key number plate

Jump starting is not recommended, especially if you use an automobile battery. The greater amperage of an automobile battery when the car engine is running can damage your motorcycle's electrical system.

Bump starting is also not recommended.

If you can't charge the battery or it appears unable to hold a charge, contact your Honda dealer.

Technical Information

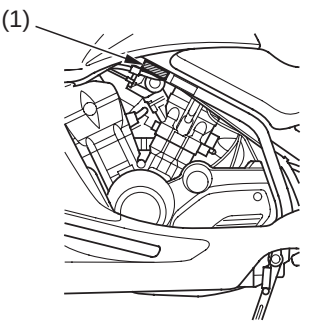
This section contains dimensions, capacities, and other technical data, plus information on government requirements and how to break-in your motorcycle.

Serial Numbers

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

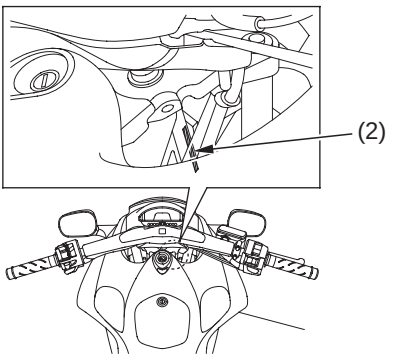
The VIN (vehicle identification number) is stamped on the right side of the steering head and also appears on the Safety Certification Label attached to the left side of the frame.

LEFT SIDE



(1) VIN

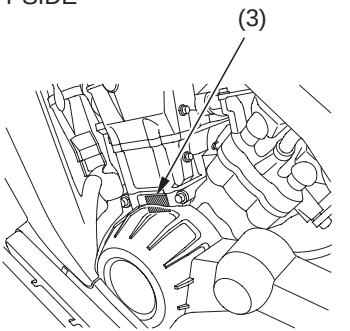
RIGHT SIDE



(2) VIN

The engine number (3) is stamped on the left side of the engine.

LEFT SIDE



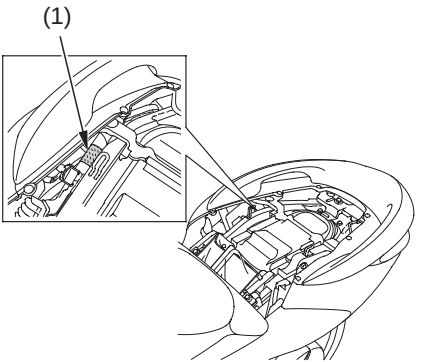
(3) engine number

Color Label & Code

The color label (1) is attached on the frame under the rear seat. Remove the rear seat (page 109) to check the label.

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

UNDER REAR SEAT



(1) color label

Dimensions	
overall length	92.3 in (2,345 mm)
overall width	32.9 in (835 mm)
overall height	43.9 in (1,115 mm)
wheelbase	63.4 in (1,610 mm)
ground clearance	5.1 in (130 mm)

Specifications

Fuel & Lubricants	
fuel recommendation	unleaded gasoline, pump octane number of 86 or higher
fuel tank capacity	3.96 US gal (15.0 ℓ) including reserve
fuel tank reserve	0.79 US gal (3.0 ℓ)
engine oil capacity	after disassembly: 4.2 US qt (4.0 ℓ) after draining: 3.1 US qt (2.9 ℓ) after draining & oil filter change: 3.5 US qt (3.3 ℓ)
engine oil recommendation	API Service Classification SG or higher except oils labeled as energy conserving on the circular API service label, SAE 10W-30, JASO T 903 standard MA, Pro Honda GN4 4-stroke oil (USA & Canada) or Honda 4-stroke oil (Canada only), or an equivalent motorcycle oil
final drive oil capacity	after draining: 5.4 US oz (160 cm^3)
cooling system, recommendation	Pro Honda HP Coolant or an equivalent high quality ethylene glycol antifreeze containing corrosion protection inhibitors specifically recommended for use in aluminum engines
cooling system, capacity	2.88 US qt (2.73 ℓ)

Capacities	
passenger capacity	operator, one passenger
maximum weight capacity	344 lbs (156 kg) rider, passenger, all cargo and accessories

Engine Specifications	
displacement	41.5 cu-in (680 cm^3)
bore & stroke	3.19 × 2.60 in (81.0 × 66.0 mm)
compression ratio	10.0 : 1
spark plug (standard)	SIMR8A9 (NGK)
spark plug gap	0.031 – 0.035 in (0.80 – 0.90 mm) no adjustment
valve clearance (cold)	intake 0.006 in (0.15 mm) exhaust 0.008 in (0.20 mm)
idle speed	1,200 ± 100 rpm

Specifications

Power Transmission	
primary reduction	1.136
secondary reduction	1.400
gear ratio, HFT	3.000 ~ 1.000
final reduction	2.833
final drive	shaft

Chassis & Suspension	
caster	28°30′
trail	4.3 in (110 mm)
tire size, front	130/70ZR17M/C (62W) DUNLOP ROADSMART CQ BRIDGESTONE BT021F G
tire size, rear	190/50ZR17M/C (73W) DUNLOP ROADSMART K BRIDGESTONE BT021R G
tire type	radial-ply, tubeless
tire pressure, front (cold)	33 psi (225 kPa , 2.25 kgf/cm^2)
tire pressure, rear (cold)	36 psi (250 kPa , 2.50 kgf/cm^2)

Specifications

Electrical	
battery	12V — 11.2 Ah
generator	0.449 kW/5,000 rpm

Lights	
headlight	12V — 55W (2 bulbs)
brake/tail light	LED
turn signal lights	12V — 21/5W (front) 12V — 21W (rear)
license light	12V — 5W

Fuses	
main	40A
HFT	10A
other fuses	10A, 20A, 30A

Torque Specifications	
engine oil drain bolt	18 lbf·ft (25 N·m , 2.5 kgf·m)
engine oil filter	19 lbf·ft (26 N·m , 2.7 kgf·m)
final drive oil drain bolt	9 lbf·ft (12 N·m , 1.2 kgf·m)
final drive oil filler cap	9 lbf·ft (12 N·m , 1.2 kgf·m)
front wheel axle bolt	44 lbf·ft (59 N·m , 6.0 kgf·m)
front wheel caliper fixing bolts	22 lbf·ft (31 N·m , 3.1 kgf·m)
front wheel axle pinch bolts	16 lbf·ft (22 N·m , 2.2 kgf·m)
rear wheel nuts	80 lbf·ft (108 N·m , 11.0 kgf·m)
step board mounting bolt	19 lbf·ft (26 N·m , 2.7 kgf·m)

Break-in Guidelines

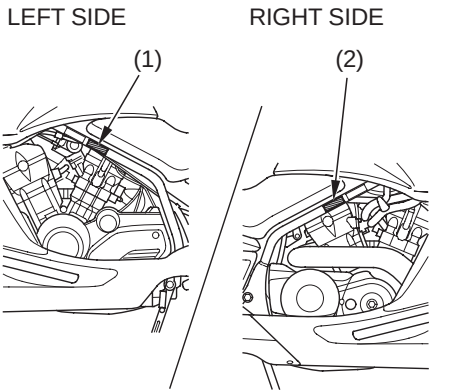
Help assure your motorcycle's future reliability and performance by paying extra attention to how you ride during the first 300 miles (500 km).

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

Exhaust Emission Requirements
The U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Environment Canada (EC) require that your motorcycle comply with applicable exhaust emissions standards during its useful life, when operated and maintained according to the instructions provided.

The Vehicle Emission Control Information label (1) is attached to the left side of the frame.

The Vehicle Emission Control Information labels (1) (2) are attached to the right and left side of the frame (Canada only).



(1) vehicle emission control information label
(2) vehicle emission control information label (Canada only)

Emission Control Systems

Noise Emission Requirements
The EPA also requires that motorcycles built after January 1, 1983 comply with applicable noise emission standards for one year or 3,730 miles (6,000 km) after the time of sale to the ultimate purchaser, when operated and maintained according to the instructions provided.

Warranty Compliance
Compliance with the terms of the Distributor's Warranties for Honda Motorcycle Emission Control Systems is necessary in order to keep the emissions system warranty in effect. (USA only)

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

Honda Motor Co., Ltd. utilizes various systems to reduce carbon monoxide, oxides of nitrogen and hydrocarbons.

Exhaust Emission Control System
The exhaust emission control system includes a secondary air injection system, PGM-FI system, a three-way catalytic converter, and heated oxygen sensor.

No adjustment to these systems should be made although periodic inspection of all components is recommended.

PGM-FI System
The PGM-FI system uses sequential multiport fuel injection. It has four subsystems: Air Intake, Engine Control, Fuel Control, and Exhaust Control.
The Engine Control Module (ECM) uses various sensors to determine how much air is going into the engine. It then controls how much fuel to inject under all operating conditions.

Ignition Timing Control System
The system constantly adjusts the ignition timing, reducing the amount of HC, CO and NOx produced.

Secondary Air Injection System
The secondary air injection system introduces filtered air into the exhaust gases in the exhaust port. The secondary air injection system helps improve emission control performance.

Three-Way Catalytic Converter
The three-way catalytic converter is in the exhaust system. Through chemical reactions, it converts HC, CO, and NOx in the engine's exhaust to carbon dioxide (CO_2), nitrogen (N), and water vapor.

Evaporative Emission Control System (California only)
This motorcycle complies with the requirements of the California Air Resources Board (CARB) evaporative emission regulations. Fuel vapor from the fuel tank is directed into the charcoal canister and air cleaner where it is adsorbed and stored while the engine is stopped. When the engine is running and the purge control solenoid valve is open, fuel vapor in the charcoal canister and air cleaner is drawn into the engine through the throttle body.

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

Problems That May Affect Motorcycle Exhaust Emissions
If you are aware of any of the following symptoms, have the vehicle inspected and repaired by your authorized Honda motorcycle dealer.

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

Noise Emission Control System

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

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

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

Fuel Permeation Emission Control System

This vehicle complies with the Fuel Permeation Emission Control regulations of the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Environment Canada (EC). The fuel tank, fuel hoses, and fuel vapor charge hoses used on this vehicle incorporate fuel permeation control technologies. Tampering with the fuel tank, fuel hoses, or fuel vapor charge hoses to reduce or defeat the effectiveness of the fuel permeation technologies is prohibited by federal regulations.

Catalytic Converter

This motorcycle is equipped with a three-way 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 fire to any combustible materials that come near it. Park your motorcycle 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 motorcycle's catalytic converter.

- Always use unleaded gasoline. Even a small amount of leaded gasoline 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 motorcycle.

- If your engine is misfiring, backfiring, stalling, or otherwise not running properly, stop riding and turn off the engine. Have your motorcycle serviced as soon as possible.

Some conventional gasolines are being blended with alcohol or an ether compound. These gasolines are collectively referred to as oxygenated fuels. To meet clean air standards, some areas of the United States and Canada use oxygenated fuels to help reduce emissions. If you use an oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirement.

Before using an oxygenated fuel, try to confirm the fuel's contents. Some states/provinces require this information to be posted on the pump.

The following are the EPA-approved percentages of oxygenates:

ETHANOL (ethyl or grain alcohol) 10% by Volume

You may use gasoline containing up to 10% ethanol by volume. Gasoline containing ethanol may be marketed under the name ''Gasohol''.

MTBE (Methyl Tertiary Butyl Ether) 15% by Volume

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

Oxygenated Fuels

METHANOL (methyl or wood alcohol) 5% by Volume

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

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

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

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

NOTICE

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

Consumer Information

This section contains information on your warranty and how to get an official Honda Service Manual.

Authorized Manuals

The Service Manual used by your authorized Honda dealer is available from Helm, Inc. (USA only, Canada: See your Honda dealer to order authorized manuals.)

Also available but not necessary to service your model is the Honda Common Service Manual which explains theory of operation and basic service information for various systems common to all Honda motorcycles, motor scooters and ATVs.

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

Publication Item No.	Description	Price Each*
61MEH00	2009 NSA700A Service Manual	$60.00
61CM002	Common Service Manual	$48.00
31MEH600	2009 NSA700A Owner's Manual	$16.00
** Prices are subject to change without notice and without incurring obligation.*		

Order On-Line: www.helminc.com

Order Toll Free: 1-888-CYCLE93 (1-888-292-5393)

(NOTE: For Credit Card Orders Only)

Monday – Friday 8:00 AM – 6:00 PM EST

OR

By completing this form you can order the materials desired. You can pay by check or money order, or charge to your credit card. Mail to Helm, Inc. at the address shown on the back of this order form (USA only).

Canada: See your Honda dealer to order authorized manuals.

Publication Item No.	Item Description	Qty.	Price Each*	Total Price
*Prices are subject to change without notice and without incurring obligation. Orders are mailed within 10 days. Please allow adequate time for delivery.		**Sub Total**		
		Purchaser's Sales Tax **Mich. add 6 %** **Calif. add 7.25 %**		
		Handling Charge		**$3.75**
		Grand Total		

SHIP TO

NOTE: Dealers and Companies please provide dealer or company name, and also the name of the person to whose attention the shipment should be sent.

Customer Name _____ Attention _____

Street address/P. O. BOX _____ Apartment Number _____

City _____ State _____ Zip Code _____

Daytime Telephone Number ( ) _____

PAYMENT

☐ Check or money order enclosed payable to Helm Inc. U.S. funds only. Do not send cash.

☐ Check here if your billing address is different from the shipping address shown above.

☐ MasterCard

☐ VISA

☐ Discover

Account Number ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Expiration: Mo. Yr. ☐☐ – ☐☐

Security Code ☐☐☐

Customer Signature _____ Date _____

These Publications cannot be returned for credit without receiving advance authorization within 14 days of delivery. For returns, a restocking fee may be applied against the original order.

HELM P.O. BOX 07280, DETROIT, MICHIGAN 48207

Warranty Coverage

Your new Honda is covered by these warranties:

- Motorcycle Limited Warranty
- Emission Control System Warranty
- Noise Control Warranty

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

It is important to realize that your warranty applies to defects in material or workmanship of your Honda. Your warranty coverage does not apply to normal wear or deterioration associated with using the motorcycle.

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

Almost all of your warranty coverage can be extended through the Honda Protection Plan (USA only). For more information, see your Honda dealer.

Warranty Service

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

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

If you have questions about warranty coverage or the nature of the repair, it is best to talk to the Service Manager of your Honda dealer.

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

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

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

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

Motorcycle Division, American Honda Motor Co., Inc., P.O. Box 2200, Torrance, CA 90509-2200, Mailstop: 100-4C-7B, Telephone: (866) 784-1870.

Canada: Refer to the Warranties Booklet that was supplied with your vehicle.

Please include the following information in your letter:

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

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

Your Honda Dealer

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

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

The parts department offers Honda Genuine Parts, Pro Honda products, Honda Genuine Accessories (USA only), and Honda accessories and products (Canada only). The same quality that went into your Honda can be found in Honda Genuine replacement parts. You'll also find comparable quality in the accessories and products available from the parts department.

The sales department offers the Honda Protection Plan to extend almost all of your warranty coverage (USA only). Your Honda dealer can inform you about competition and other riding events in your area. You'll also find that your dealer is a source of information about safety training available in your local area and the Honda Rider's Club of America (USA only).

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

The Honda Rider's Club (USA only)

You may be eligible for a Honda Rider's Club of America (HRCA) membership with the purchase of your new Honda. You can log on to the HRCA Clubhouse website for details at *www.hrca.honda.com.*

Reporting Safety Defects (USA only)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying American Honda Motor Co., Inc.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or American Honda Motor Co., Inc.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to *http://www.safercar.gov*; or write to: Administrator, NHTSA, 1200 New Jersey Avenue, SE., Washington, DC 20590.

You can also obtain other information about motor vehicle safety from *http://www.safercar.gov*.

Table of Contents

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

Table of Contents

Table of Contents

Index

A

B

C

D

E

(cont'd)

F

G

H

M

N

O

P

R

(cont'd)

S

Quick Reference

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

How to Avoid Costly Repairs

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

Frequent causes of costly repairs are:

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

Record important information on the following page:

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

Quick Reference

Scheduled Maintenance	Initial: 600 miles (1,000 km) Regular: every 8,000 miles (12,800 km)
Pre-ride Inspection	Check the following items each time before you ride (page 57): tires & wheels, leaks, loose parts, lights, throttle, brakes, indicators.
Periodic Checks	Check the following items monthly (page 95): tires & wheels, fluids, lights, freeplay, fuses, nuts & bolts.
Fuel/Capacity	unleaded gasoline, pump octane number 86 or higher 3.96 US gal (15.0 ℓ)
Engine Oil	API Service Classification SG or higher except oils labeled as energy conserving on the circular API service label, SAE 10W-30, JASO T 903 standard MA, Pro Honda GN4 4-stroke oil or equivalent
Maximum Weight Capacity	344 lbs (156 kg) rider, passenger, all cargo and accessories

Tires	Front: 130/70ZR17M/C (62W) DUNLOP ROADSMART CQ or BRIDGESTONE BT021F G Rear: 190/50ZR17M/C (73W) DUNLOP ROADSMART K or BRIDGESTONE BT021R G Type: radial-ply, tubeless
Tire Pressure (cold)	Front: 33 psi (225 kPa , 2.25 kgf/cm²) Rear: 36 psi (250 kPa , 2.50 kgf/cm²)
Spark Plugs	standard: SIMR8A9 (NGK)
Coolant	ethylene glycol antifreeze (silicate-free) for aluminum engines in 50/50 solution with Pro Honda HP Coolant or an equivalent distilled water
Fuses	main : 40A HFT : 10A other: 10A, 20A, 30A
Final Drive Oil	Hypoid Gear Oil SAE 80

Quick Reference

These symbols are used in Controls & Features section:

SYMBOL	COMPONENT	SEE PAGE
	START button	34
	RUN — engine stop switch	34
	OFF — engine stop switch	34
	HI — headlight dimmer switch	36
	LO — headlight dimmer switch	36
	turn signal switch	37
	horn button	37
	hazard switch	41