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

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



The vehicle pictured in this owner's manual may not match your actual vehicle.

# Welcome

Congratulations on your purchase of a new Honda motorcycle. Your selection of a Honda makes you part of a worldwide family of satisfied customers who appreciate Honda's reputation for building quality into every product.

To ensure your safety and riding pleasure:

- Read this owner's manual carefully.
- Follow all recommendations and procedures contained in this manual.
- Pay close attention to safety messages contained in this manual and on the motorcycle.
- The following codes in this manual indicate each country.
- The illustrations here in are based on the CB1000RA ED type.

**Country Code**

| Code CB1000RA | Country |
|---|---|
| ED, II ED, III ED, IV ED | European direct sales |
| KO | Korea |
| GS | GCC Countries |
| U | Australia, New Zealand |

*The specifications may vary with each locale.

# A Few Words About Safety

Your safety, and the safety of others, is very important. 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 safety 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 judgement.

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:

**⚠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.**

**Other important information is provided under the following titles:**

NOTICE Information to help you avoid damage to your motorcycle, other property, or the environment.

# Contents

# Motorcycle Safety

This section contains important information for safe riding of your motorcycle. Please read this section carefully.

# Safety Guidelines

Follow these guidelines to enhance your safety:

- Perform all routine and regular inspections specified in this manual.
- Stop the engine and keep sparks and flame away before filling the fuel tank.
- Do not run the engine in enclosed or partly enclosed areas. Carbon monoxide in exhaust gases is toxic and can kill you.

## Always Wear a Helmet

It's a proven fact: helmets and protective apparel significantly reduce the number and severity of head and other injuries. So always wear an approved motorcycle helmet and protective apparel. P. 10

## Before Riding

Make sure that you are physically fit, mentally focused and free of alcohol and drugs. Check that you and your passenger are both wearing an approved motorcycle helmet and protective apparel. Instruct your passenger on holding onto the seat strap or your waist, leaning with you in turns, and keeping their feet on the footpegs, even when the motorcycle is stopped.

## Take Time to Learn & Practice

Even if you have ridden other motorcycles, practice riding in a safe area to become familiar with how this motorcycle works and handles, and to become accustomed to the motorcycle's size and weight.

## Ride Defensively

Always pay attention to other vehicles around you, and do not assume that other drivers see you. Be prepared to stop quickly or perform an evasive maneuver.

*Continued*

## Make Yourself Easy to See

Make yourself more visible, especially at night, by wearing bright reflective clothing, positioning yourself so other drivers can see you, signaling before turning or changing lanes, and using your horn when necessary.

## Ride within Your Limits

Never ride beyond your personal abilities or faster than conditions warrant. Fatigue and inattention can impair your ability to use good judgement and ride safely.

## Don't Drink and Ride

Alcohol and riding don't mix. Even one alcoholic drink can reduce your ability to respond to changing conditions, and your reaction time gets worse with every additional drink. 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. Inspect your motorcycle before every ride and perform all recommended maintenance. Never exceed load limits (P. 16), and do not modify your motorcycle or install accessories that would make your motorcycle unsafe (P. 15).

## If You are Involved in a Crash

Personal safety is your first priority. 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 to continue riding, first turn the ignition switch to the O (Off) position, and evaluate the condition of your motorcycle. Inspect for fluid leaks, check the tightness of critical nuts and bolts, and check the handlebar, control levers, brakes, and wheels. Ride slowly and cautiously.
Your motorcycle may have suffered damage that is not immediately apparent. Have your motorcycle thoroughly checked at a qualified service facility as soon as possible.

## Carbon Monoxide Hazard

Exhaust contains poisonous carbon monoxide, a colourless, odorless gas. Breathing carbon monoxide can cause loss of consciousness and may lead to death.

If you run the engine in confined or even partly enclosed area, the air you breathe could contain a dangerous amount of carbon monoxide.

Never run your motorcycle inside a garage or other enclosure.

**⚠WARNING**

Running the engine of your motorcycle while in an enclosed or even partially enclosed area can cause a rapid build-up of toxic carbon monoxide gas.

Breathing this colourless, odorless gas can quickly cause unconsciousness and lead to death.

Only run your motorcycle's engine when it is located in a well ventilated area outdoors.

# Image Labels

Except KO type

The following pages describe the label meanings. Some labels warn you of potential hazards that could cause serious injury. Others provide important safety information. Read this information carefully and don't remove the labels.

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

There is a specific symbol on each label. The meanings of each symbol and label are as follows.

Read instructions contained in Owner's Manual carefully.

Read instructions contained in Shop Manual carefully. In the interest of safety, take the motorcycle to be serviced only by your dealer.

**DANGER (with RED background)**
You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.
**WARNING (with ORANGE background)**
You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.
**CAUTION (with YELLOW background)**
You CAN be HURT if you don't follow instructions.

**BATTERY LABEL**
**DANGER**

ED, II ED, III ED, IV ED, GS type

- Keep flame and spark away from the battery. Battery produce explosive gas that can cause explosion.
- Wear the eye protection and rubber gloves when handling the battery, or you can get burned or lose your eyesight by the battery electrolyte.
- Do not allow children and other people to touch a battery unless they understand proper handling and hazards of the battery very well.
- Handle the battery electrolyte with extreme care as it contains dilute sulfuric acid. Contact with your skin or eyes can burn you or cause loss of your eyesight.
- Read this manual carefully and understand it before handling the battery. Neglect of the instructions can cause personal injury and damage to the motorcycle.
- Do not use a battery with the electrolyte at or below the lower level mark. It can explode causing serious injury.

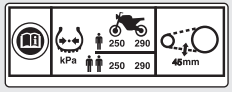
*Continued* 


**RADIATOR CAP LABEL**
**DANGER**
NEVER OPEN WHEN HOT.
Hot coolant will scald you.
Relief pressure valve begins to open at **1.1 kgf/cm²**.


**ACCESSORIES AND LOADING WARNING LABEL**
**WARNING**
ED, II ED, III ED, IV ED type
ACCESSORIES AND LOADING

- The safety stability and handling of this motorcycle may be affected by the addition of accessories and luggage.
- Read carefully the instructions contained in user's manual and installation guide before installing any accessory.
- The total weight of accessories and luggage added to rider's and passenger's weight should not exceed **188 kg (414 lb)**, which is the maximum weight capacity.
- The luggage weight must not exceed **27 kg (60 lb)** under any circumstances.
- The fitting of large fork-mounted or large handlebar mounted fairing is not recommended.

**REAR CUSHION LABEL**
GAS FILLED
Do not open. Do not heat.




**TYRE INFORMATION & DRIVE CHAIN LABEL**
Cold tyre pressure:
[Driver only]
Front **250 kPa (2.50 kgf/cm², 36 psi)**
Rear **290 kPa (2.90 kgf/cm², 42 psi)**
[Driver and passenger]
Front **250 kPa (2.50 kgf/cm², 36 psi)**
Rear **290 kPa (2.90 kgf/cm², 42 psi)**
Keep chain adjusted and lubricated.
Freeplay **40 - 50 mm (1.6 - 2.0 in)**


**SAFETY REMINDER LABEL**
For your protection, always wear helmet, protective apparel.
**FUEL LABEL**
Unleaded petrol only
ETHANOL up to 10 % by volume

# Safety Precautions

- Ride cautiously and keep your hands on the handlebar and feet on the footpegs.
- Keep passenger's hands onto the seat strap or grab rail or your waist, passenger's feet on the footpegs while riding.
- Always consider the safety of your passenger, as well as other drivers and riders.

## Protective Apparel

Make sure that you and any passenger are wearing an approved motorcycle helmet, eye protection, and high-visibility protective clothing. Ride defensively in response to weather and road conditions.

### Helmet

Safety-standard certified, high-visibility, correct size for your head

- Must fit comfortably but securely, with the chin strap fastened.
- Face shield with unobstructed field of vision or other approved eye protection

**⚠WARNING**

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

Make sure that you and any passenger always wear an approved helmet and protective apparel.

### Gloves

Full-finger leather gloves with high abrasion resistance

### Boots or Riding Shoes

Sturdy boots with non-slip soles and ankle protection

### Jacket and Trousers

Protective, highly visible, long-sleeved jacket and durable trousers for riding (or a protective suit)

# Riding Precautions

## Running-in Period

During the first 500 km (300 miles) of running, follow these guidelines to ensure your motorcycle's future reliability and performance.

- Avoid full-throttle starts and rapid acceleration.
- Avoid hard braking and rapid down-shifts.
- Ride conservatively.

## Brakes

Observe the following guidelines:

- Avoid excessively hard braking and downshifting.
  - ▶ Sudden braking can reduce the motorcycle's stability.
  - ▶ Where possible, reduce speed before turning; otherwise you risk sliding out.
- Exercise caution on low traction surfaces.
  - ▶ The tyres slip more easily on such surfaces and braking distances are longer.
- Avoid continuous braking.
  - ▶ Repeated braking, such as when descending long, steep slopes can seriously overheat the brakes, reducing their effectiveness. Use engine braking with intermittent use of the brakes to reduce speed.
- For full braking effectiveness, operate both the front and rear brakes together.



*Continued* 

### Anti-lock Brake System (ABS)

This model is equipped with an Anti-lock Brake System (ABS) designed to help prevent the brakes from locking up during hard braking.

- ABS does not reduce braking distance. In certain circumstances, ABS may result in a longer stopping distance.
- ABS does not function at speeds below 10 km/h (6 mph).
- The brake lever and pedal may recoil slightly when applying the brakes. This is normal.
- Always use the recommended front/rear tyres and sprockets to ensure correct ABS operation.

### Engine Braking

Engine braking helps slow your motorcycle down when you release the throttle. For further slowing action, downshift to a lower gear. Use engine braking with intermittent use of the brakes to reduce speed when descending long, steep slopes.

### Wet or Rainy Conditions

Road surfaces are slippery when wet, and wet brakes further reduce braking efficiency. Exercise extra caution when braking in wet conditions.

If the brakes get wet, apply the brakes while riding at low speed to help them dry.

## Parking

- Park on a firm, level surface.
- If you must park on a slight incline or loose surface, park so that the motorcycle cannot move or fall over.
- Make sure that high-temperature parts cannot come into contact with flammable materials.
- Do not touch the engine, muffler, brakes and other high-temperature parts until they cool down.
- To reduce the likelihood of theft, always lock the handlebar and remove the key when leaving the motorcycle unattended.
  Use of an anti-theft device is also recommended.

### Parking with the Side Stand

1. Stop the engine.
2. Push the side stand down.
3. Slowly lean the motorcycle to the left until its weight rests on the side stand.
4. Turn the handlebar fully to the left.
   ▶ Turning the handlebar to the right reduces stability and may cause the motorcycle to fall.
5. Turn the ignition switch to the (Lock) position and remove the key. P. 58

## Refuelling and Fuel Guidelines

Follow these guidelines to protect the engine, fuel system and catalytic converter:

- Use only unleaded petrol.
- Use recommended octane number. Using lower octane petrol will result in decreased engine performance.
- Do not use fuels containing a high concentration of alcohol. P. 162
- Do not use stale or contaminated petrol or an oil/petrol mixture.
- Avoid getting dirt or water in the fuel tank.

*Continued*

## Honda selectable torque control

When the Honda selectable torque control (Torque Control) detects rear wheel spin during acceleration, the system will limit the amount of torque applied to the rear wheel based on the Torque Control level selected.
Additionally, the system ease the rapid motion during the wheelie when accelerating based on the Torque Control level selected.

Torque Control will allow some wheel spin during acceleration at the lower Torque Control levels settings. Select a level that is appropriate for your skill and riding conditions.

Torque Control does not work during deceleration and will not prevent the rear wheel from skidding due to engine braking. Do not close the throttle suddenly, especially when riding on slippery surfaces.

Torque Control may not compensate for rough road conditions or rapid throttle operation. Always consider road and weather conditions, as well as your skills and condition, when applying throttle.
If your motorcycle gets stuck in mud, snow or sand, it may be easier to free it by turning off the Torque Control temporarily.
Temporarily turning off Torque Control also may help you maintain control and balance when riding on off-road terrain.

Always use the recommended tyres and sprockets to ensure correct Torque Control operation.

# Accessories & Modifications

We strongly advise that you do not add any accessories that were not specifically designed for your motorcycle by Honda or make modifications to your motorcycle from its original design. Doing so can make it unsafe. Modifying your motorcycle may also void your warranty and make your motorcycle illegal to operate on public roads and highways. Before deciding to install accessories on your motorcycle be certain the modification is safe and legal.

**⚠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.

Do not pull a trailer with, or attach a sidecar to, your motorcycle. Your motorcycle was not designed for these attachments, and their use can seriously impair your motorcycle's handling.

# Loading

- Carrying extra weight affects your motorcycle's handling, braking and stability. Always ride at a safe speed for the load you are carrying.
- Avoid carrying an excessive load and keep within specified load limits.
  **Maximum weight capacity** P. 164
- Tie all luggage securely, evenly balanced and close to the centre of the motorcycle.
- Do not place objects near the lights or the muffler.

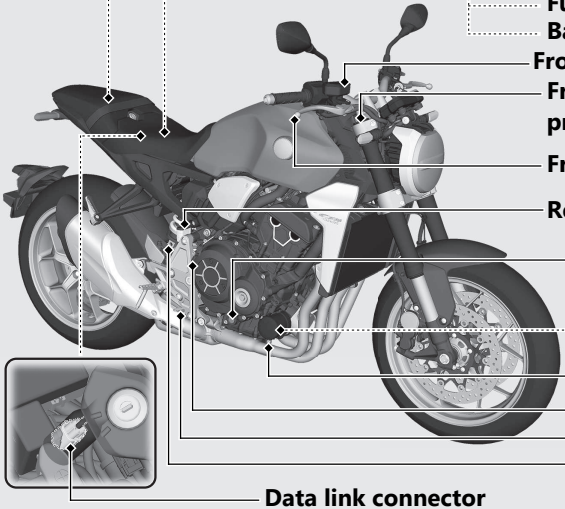
**⚠WARNING**

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

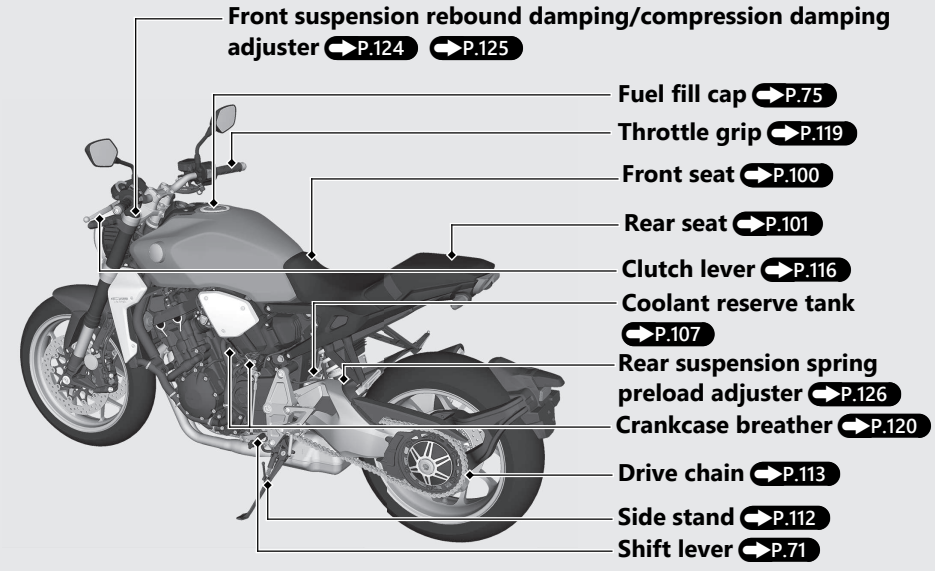
Follow all load limits and other loading guidelines in this manual.

# Parts Location





Tool kit P.77
Document bag P.77
Main fuse/ABS fuse P.146
Fuse box P.146
Battery P.99
Front brake fluid reservoir P.109
Front suspension spring preload adjuster P.123
Front brake lever P.122
Rear brake fluid reservoir P.109
Engine oil level inspection window P.103
Engine oil filter P.105
Engine oil drain bolt P.105
Engine oil fill cap P.103
Rear brake pedal
Rear suspension rebound damping adjuster P.127
Data link connector


Front suspension rebound damping/compression damping adjuster P.124 P.125
Fuel fill cap P.75
Throttle grip P.119
Front seat P.100
Rear seat P.101
Clutch lever P.116
Coolant reserve tank P.107
Rear suspension spring preload adjuster P.126
Crankcase breather P.120
Drive chain P.113
Side stand P.112
Shift lever P.71

# Instruments

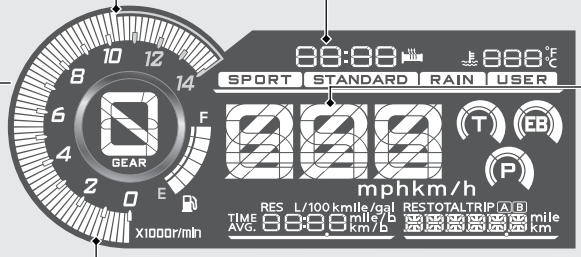



**Display Check**

When the ignition switch is turned to the | (On) position, initial animation will show. If any part of these displays does not come on when it should, have your dealer check for problems.

**Tachometer red zone**
(excessive engine rpm range)

**Clock (12-hour or 24-hour display)**
**To set the clock:** P.37 P.38



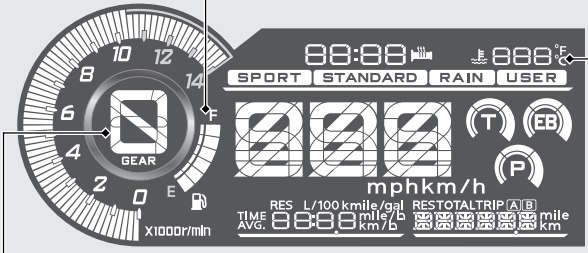

**Speedometer**

**Tachometer**

NOTICE
Do not operate the engine in the tachometer red zone. Excessive engine speed can adversely affect engine life.

## Instruments *(Continued)*






**Gear position indicator**

The gear position is shown in the gear position indicator.

► "-" appears when the transmission is not shifted properly.

**Fuel gauge**

Remaining fuel when only 1st (E) segment starts flashing: approximately 3.5 L (0.92 US gal, 0.77 Imp gal)


**If the fuel gauge indicator flashes in a repeat pattern or turns off:**

P.134

**Coolant temperature gauge ( )**

Display range: 35°C to 132°C

- 34°C or less: "---" is displayed.
- Between 122°C and 131°C:
  - High coolant temperature indicator lights.
  - Coolant temperature digits flash.
- Above 132°C:
  - High coolant temperature indicator lights.
  - "132°C" flashes.
- Even if the engine coolant temperature is low, the cooling fan may start running when you rev up the engine. This is normal.

## Instruments *(Continued)*

Press the **MODE** button to move the cursor to a desired display.



**Handle grip heater status icon**

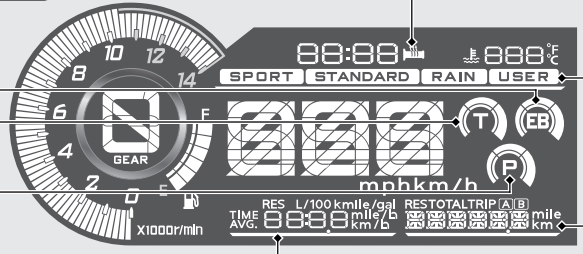
II ED, IV ED type

The handle grip heater status icon will appear while the handle grip heater is on. P.59

**EB level** P.66

**Torque Control level** P.62 P.66

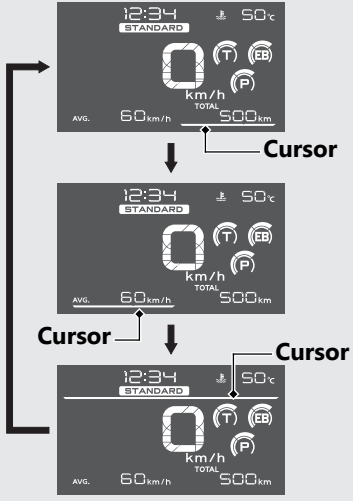
**P level** P.66



**Riding mode display** P.64

**INFO 1 display** P.26

**INFO 2 display** P.30




Press the **MODE** button

# Instruments *(Continued)*



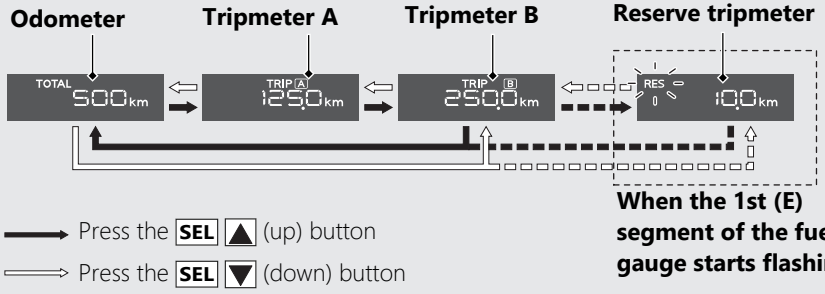
## INFO 1 display

You can select the following:

- Odometer [TOTAL]
- Tripmeter [TRIP A/B]
- Reserve tripmeter [RES]

## Changing the INFO 1 display

1. Select the INFO 1 display. P.25
2. Press the SEL ▲ (up) or the SEL ▼ (down) button until the desired indication is displayed.
3. Press the MODE button. The INFO 1 display is set, and then the display moves to the INFO 2 display.




When the 1st (E) segment of the fuel gauge starts flashing, the odometer and tripmeters switches to the reserve tripmeter.

### Odometer

Total distance ridden.
When "------" is displayed, go to your dealer for service.

### Tripmeter A/B

Distance ridden since tripmeter was reset.
When "----.-" is displayed, go to your dealer for service.

### To reset the tripmeter: P.28

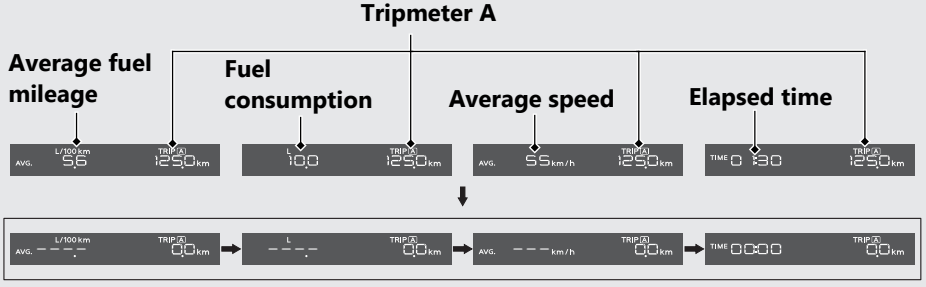
### Reserve tripmeter

Distance ridden since the 1st (E) segment of the fuel gauge starts flashing.
When the 1st (E) segment of the fuel gauge starts flashing, the odometer and tripmeters switches to the reserve tripmeter. You should refill the tank as soon as possible.
When "----.- " is displayed, go to your dealer for service.
After refuelling more than the reserve amount, the display returns to normal.

## Instruments *(Continued)*

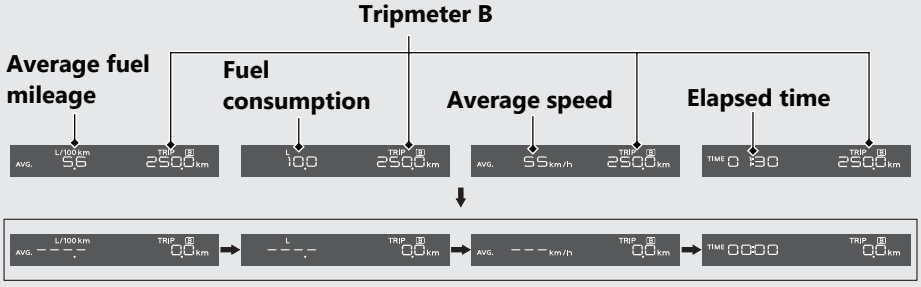
### To reset the tripmeter, average fuel mileage, fuel consumption, average speed and elapsed time

To reset tripmeter A, average fuel mileage, fuel consumption, average speed and elapsed time (these are based on tripmeter A) together, press and hold the **MODE** button while tripmeter A or odometer and average fuel mileage, fuel consumption, average speed and elapsed time is displayed.




Then, the display returns to the last selected indication.
Also, the tripmeter A, average fuel mileage, fuel consumption, average speed and elapsed time will automatically reset by refuelling more than the reserve amount and riding your motorcycle for 0.1 km (0.06 mile). You can activate or deactivate the automatic reset mode by refuelling. P.40

To reset tripmeter B, average fuel mileage, fuel consumption, average speed and elapsed time (these are based on tripmeter B) together, press and hold the **MODE** button while tripmeter B is displayed.




Then, the display returns to the last selected indication.

# Instruments *(Continued)*

## INFO 2 display

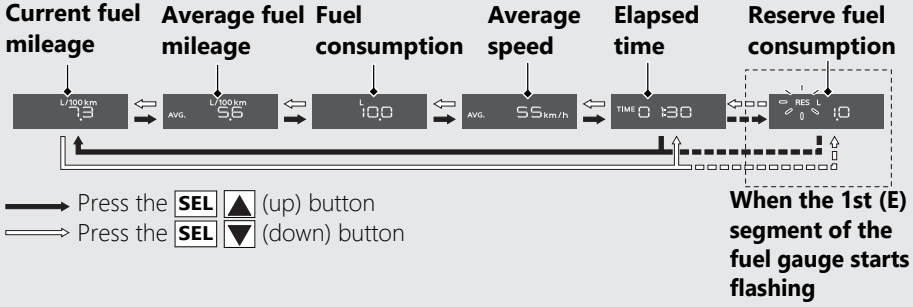
You can select the following:

- Current fuel mileage
- Average fuel mileage
- Fuel consumption
- Average speed
- Elapsed time
- Reserve fuel consumption

## Changing the INFO 2 display

1. Select the INFO 2 display. ➡P.25
2. Press the SEL ▲ (up) or the SEL ▼ (down) button until the desired indication is displayed.
3. Press the MODE button. The INFO 2 display is set, and then the display moves to the riding mode display.

When the 1st (E) segment of the fuel gauge starts flashing, the current fuel mileage, average fuel mileage, fuel consumption, average speed and elapsed time switches to the reserve fuel consumption.



## Current fuel mileage

Displays the current or instant fuel mileage.

Except KO type

Display range: 0.0 to 300.0 km/L (L/100km, mile/L or mile/gal)

- When your speed is less than 5 km/h (3 mph): "---.-" is displayed.
- More than 300.0 L/100km: "---.-" is displayed.

KO type

Display range: 0.0 to 300.0 km/L

- When your speed is less than 5 km/h: "---.-" is displayed.

When "---.-" is displayed except for the above-mentioned cases, go to your dealer for service.

# Instruments *(Continued)*

## Average fuel mileage

Displays the average fuel mileage since the selected tripmeter was reset.
The average fuel mileage will be calculated based on value displayed on the tripmeter (A or B) selected. Also, the average fuel mileage for tripmeter A will be displayed when the odometer is selected on INFO 1 display.

Except KO type

Display range: 0.0 to 300.0 km/L (L/100km, mile/L or mile/gal)

- More than 300.0 L/100km: "---.-" is displayed.
- Initial display: "---.-" is displayed.
- When the tripmeter A or B is reset: "---.-" is displayed.

KO type

Display range: 0.0 to 300.0 km/L

- Initial display: "---.-" is displayed.
- When the tripmeter A or B is reset: "---.-" is displayed.

When "---.-" is displayed except for the above-mentioned cases, go to your dealer for service.

**To reset the average fuel mileage: P.28**

### Fuel consumption

Displays the fuel consumption since the selected tripmeter was reset.
The fuel consumption will be calculated based on value displayed on the tripmeter (A or B) selected. Also, the fuel consumption for tripmeter A will be displayed when the odometer is selected on INFO 1 display.

Except KO type

Display range: 0.0 to 300.0 L (litres) or 0.0 to 300.0 gal (gallon)

- When the tripmeter A or B is reset: "---.-" is displayed.

KO type

Display range: 0.0 to 300.0 L (litres)

- When the tripmeter A or B is reset: "---.-" is displayed.

When "---.-" is displayed except for the above-mentioned cases, go to your dealer for service.

**To reset the fuel consumption: P.28**

### Average speed

Displays the average speed since the selected tripmeter was reset.
The average speed will be calculated based on value displayed on the tripmeter (A or B) selected. Also, the average speed for tripmeter A will be displayed when the odometer is selected.

- Initial display: "---" is displayed.

When "---" is displayed while riding, go to your dealer for service.

**To reset the average speed: P.28**

*Continued*

## Instruments *(Continued)*

### Elapsed time

Displays the operating time since the selected tripmeter was reset.
The elapsed time will be calculated based on value displayed on the tripmeter (A or B) selected. Also, the elapsed time for tripmeter A will be displayed when the odometer is selected.
Display range: 00:00 to 99:59 (hours:minutes)

- The elapsed time return to 00:00 when the readout exceeds 99:59.

**To reset the elapsed time: P.28**

### Reserve fuel consumption

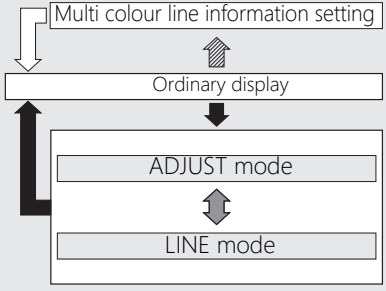
Displays the fuel consumption since the 1st (E) segment of the fuel gauge starts flashing.
When the 1st (E) segment of the fuel gauge starts flashing, the current fuel mileage, average fuel mileage, fuel consumption, average speed and elapsed time switches to the reserve fuel consumption.
You should refill the tank as soon as possible.

- Flashes from "0.0" L or gal.
- ► When the amount of consumed fuel is more than 2.1 L (0.55 US gal, 0.46 Imp gal), the RES mark on the display blinks faster.

After refuelling more than the reserve amount, the display returns to normal.

**Display Setting**

Select the items you want to set from the following setting modes.




➡ Press and hold the **SEL** ▲ (up) or the **SEL** ▼ (down) button and the **MODE** button

⇨ Press the **MODE** button

▨ Press and hold the **SEL** ▲ (up) or the **SEL** ▼ (down) button

➡ Press the **SEL** ▲ (up) or the **SEL** ▼ (down) button

To set the ADJUST mode or LINE mode, press the **MODE** button.

If the ignition switch is turned to the ○ (Off) position or none of the **MODE**, **SEL** ▲ (up) and **SEL** ▼ (down) buttons are pressed for about 30 seconds, the control is automatically switched from the setting mode to the ordinary display.

*Continued* 

# Instruments *(Continued)*

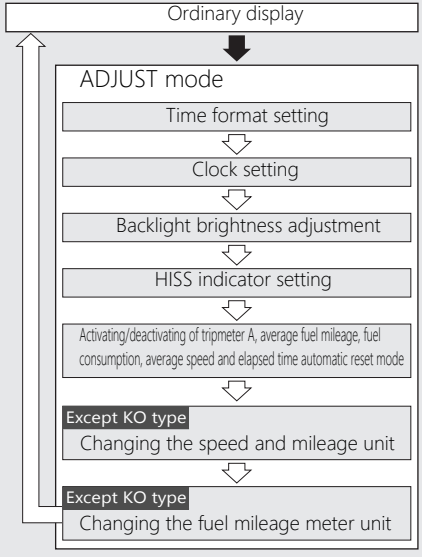
## ADJUST mode

Following items can be changed sequentially.

- Time format setting
- Clock setting
- Backlight brightness adjustment
- HISS indicator setting
- Activating/deactivating of tripmeter A, average fuel mileage, fuel consumption, average speed and elapsed time automatic reset mode
- Except KO type
  Changing the speed and mileage unit
- Except KO type
  Changing the fuel mileage meter unit

➡Press and hold the **SEL** ▲ (up) or the **SEL** ▼ (down) button and the **MODE** button

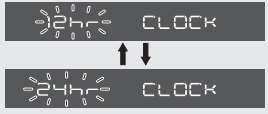
⇨Press the **MODE** button



If the ignition switch is turned to the ○ (Off) position or none of the **MODE**, **SEL** ▲ (up) and **SEL** ▼ (down) buttons is pressed for about 30 seconds, the control is automatically switched from the setting mode to the ordinary display.
If the buttons are not pressed for about 30 seconds, items in the process of being set will be discarded and only items where settings have been finalised will be applied.
Only if the ignition switch is turned to the ○ (Off) position will items in the process of being set and those that are finalised be applied.

**1 Time format setting:**
You can switch the time format between 12 hour format or 24 hour format.

1. Turn the ignition switch to the | (On) position.
2. Select the ADJUST mode. ➡P.35
   ▶ The current time format start flashing.
3. Press the **SEL** ▲ (up) button or the **SEL** ▼ (down) button to select "12hr" or "24hr".




4. Press the **MODE** button. The time format is set, and then the display moves to the clock setting.

## Instruments *(Continued)*

### 2 Clock setting:

1. Press the **SEL** ▲ (up) button or the **SEL** ▼ (down) button until the desired hour is displayed.
   - ► Press and hold the **SEL** ▲ (up) button or the **SEL** ▼ (down) button to advance the hour fast.

2. Press the **MODE** button. The minute digits start flashing.

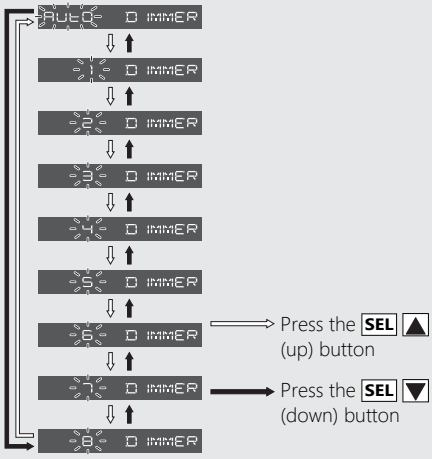
3. Press the **SEL** ▲ (up) button or the **SEL** ▼ (down) button until the desired minute is displayed.
   - ► Press and hold the **SEL** ▲ (up) button or the **SEL** ▼ (down) button to advance the minute fast.

4. Press the **MODE** button. The clock is set, and then the display moves to the backlight brightness adjustment.

**3 Backlight brightness adjustment:**

You can adjust the brightness to one of eight levels or "Auto" (Auto adjustment).

1. Press the **SEL** ▲ (up) button or the **SEL** ▼ (down) button. The brightness is switched.
2. Press the **MODE** button. The backlight is set, and then the display moves to the on/off of blinks of HISS indicator.



## Instruments *(Continued)*

**4 HISS indicator setting:**

You can select the blink or off the HISS indicator.

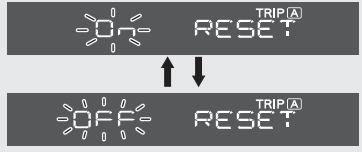
1. Press the SEL ▲ (up) button or the SEL ▼ (down) button to select "On" (blinks) or "OFF" (off).


2. Press the MODE button. The HISS indicator setting is set, and then the display moves to the Activating/deactivating of tripmeter A, average fuel mileage, fuel consumption, average speed and elapsed time automatic reset mode

**5 Activating/deactivating of tripmeter A, average fuel mileage, fuel consumption, average speed and elapsed time automatic reset mode:**

You can also activate or deactivate the automatic reset mode by refuelling after 1st (E) segment of the fuel gauge starts flashing. Activation is initially set.

1. Press the SEL ▲ (up) button or the SEL ▼ (down) button to select "On"(activate) or "OFF" (deactivate) in the automatic reset mode.



❷ Except KO type

Press the **MODE** button. The activation/deactivation of automatic reset mode is set, and then the display moves to the changing of the speed and mileage unit.

KO type

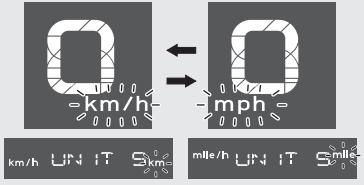
Press the **MODE** button. The activation/deactivation of automatic reset mode is set, and then the display will return to the ordinary display.

### 6 Changing the speed and mileage unit:

Except KO type

❶ Press the **SEL** ▲ (up) button or the **SEL** ▼ (down) button to select either “km/h” & “km” or “mph” & “mile”.

► The message of "UNIT SPEED" scroll in INFO 1 display.



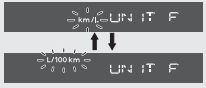

❷ Press the **MODE** button. The speed and mileage unit is set, and then the display moves to the changing of the fuel mileage meter unit.

## Instruments *(Continued)*

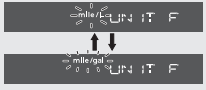
### 7 Changing the fuel mileage meter unit:

Except KO type

1. Press the **SEL** ▲ (up) button or the **SEL** ▼ (down) button to select "L/100km" or "km/L".
   ► The message of "UNIT FUEL COM" scroll in INFO 1 display.




   If the "mph" for speed and "mile" for mileage are selected, the fuel mileage shown by "mile/gal" or "mile/L".




2. Press the **MODE** button. The activation/deactivation of automatic reset mode is set, and then the display will return to the ordinary display.

**LINE mode**

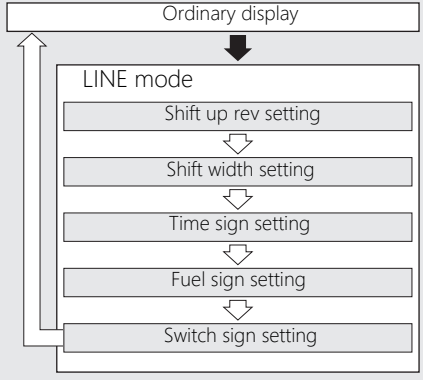
Following items can be changed sequentially.

- Shift up rev setting
- Shift width setting
- Time sign setting
- Fuel sign setting
- Switch sign setting


If the time sign, fuel sign and switch sign setting is on, the multi colour line is lit or blink.

➡Press and hold the **SEL** ▲ (up) or the **SEL** ▼ (down) button and the **MODE** button

⇨Press the **MODE** button





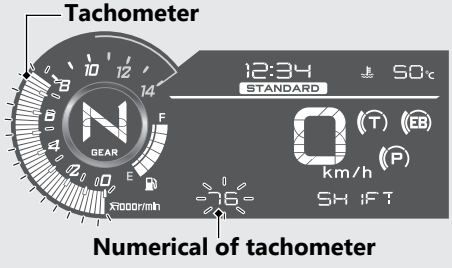

*Continued* 

## Instruments *(Continued)*

### 1 Shift up rev setting

You can adjust the shift up point.

1. Turn the ignition switch to the ❙ (On) position.
2. Select the LINE mode. P.35
   - ► The tachometer bar and numerical of tachometer on INFO 2 display start flashing, and the message of "SHIFT REV" scroll in INFO 1 display.



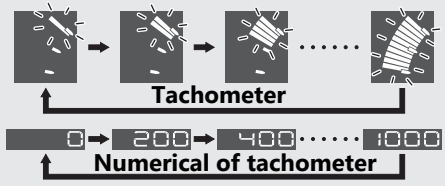

3. Each time the **SEL** ▲ (up) button or the **SEL** ▼ (down) button is pressed, tachometer bar and numerical of tachometer on INFO 2 display increase or decrease by 200 r/min (rpm) (one segment). When the set value exceeds the allowable range, the set value automatically returns to 5,000 r/min (rpm) or 11,400 r/min (rpm).
   - ► Press and hold the **SEL** ▲ (up) button or the **SEL** ▼ (down) button to advance the RPM fast.
   - ► Available setting range: 5,000 to 11,400 r/min (rpm)
4. Press the **MODE** button. The shift up rev is set, and then the display moves to the siht width setting.

**2 Shift width setting**

You can set the shift up point interval RPM. The tachometer bar and numerical of tachometer on INFO 2 display start flashing, and the message of "SHIFT WIDTH" scroll in INFO 1 display.

❶ Each time the SEL ▲ (up) button or the SEL ▼ (down) button is pressed, tachometer bar and numerical of tachometer on INFO 2 display increase or decrease by 200 r/min (rpm). When the set value exceeds the allowable range, the set value automatically returns to 0 r/min (rpm) or 1,000 r/min (rpm).

- ▶ Press and hold the SEL ▲ (up) button or the SEL ▼ (down) button to advance the RPM fast.
- ▶ Available setting range: 0 to 1,000 r/min (rpm) (10 segments)
- ▶ Initial setting: 600 r/min (rpm)






*Continued* 

## Instruments *(Continued)*

Ex: When shift up rev setting is 10,000 r/min (rpm) and shift width setting is 200 r/min (rpm).

When the multi colour line information is set rev up linkage mode (white colour mode) P.50 :

| multi colour line | r/min (rpm) |
|---|---|
| Blinking | 9,600 |
| Blinking fast | 9,800 |
| Blinking fastest | 10,000 |

When the multi colour line information is set rev up linkage mode (colour mode) P.51 :

| multi colour line | r/min (rpm) |
|---|---|
| Yellow | 9,600 |
| Amber | 9,800 |
| Pink | 10,000 |

If the shift width setting is 0 r/min (rpm), the multi colour line starts to flash when reaching to the setting value of shift up rev.

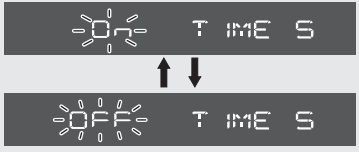
2. Press the **MODE** button. The shift width is set, and then the display moves to the time sign setting.

### 3 Time sign setting

You can set the time sign of multi colour line on or off.

When the minutes of clock changes from 59 to 00, multi colour line will blink three times if the setting is on.

1. Press the SEL ▲ (up) button or the SEL ▼ (down) button to select "On" or "OFF".
   ▶ The message of "TIME SIGN" scroll in INFO 1 display.



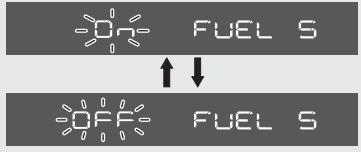

2. Press the MODE button. The time sign is set, and then the display moves to the fuel sign setting.

### 4 Fuel sign setting

You can set the fuel sign of multi colour line on or off.

When the fuel gauge only 1st (E) segment starts flashing, multi colour line will light at amber for 15 seconds if the setting is on.

1. Press the SEL ▲ (up) button or the SEL ▼ (down) button to select "On" or "OFF"
   ▶ The message of "FUEL SIGN" scroll in INFO 1 display.




2. Press the MODE button. The fuel sign is set, and then the display moves to the switch sign setting.



*Continued* 

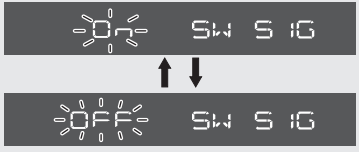
## Instruments *(Continued)*

### 5 Switch sign setting

You can set switch sign of multi colour line on or off.

When press the **SEL** ▲ (up) button or the **SEL** ▼ (down) button or **MODE** button, multi colour line will light if the setting is on.

1. Press the **SEL** ▲ (up) button or the **SEL** ▼ (down) button to select "On" or "OFF".
   ▶ The message of "SW SIGN" scroll in INFO 1 display.



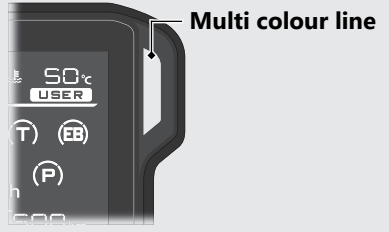

2. Press the **MODE** button. The switch sign is set, and then the display will return to the ordinary display.

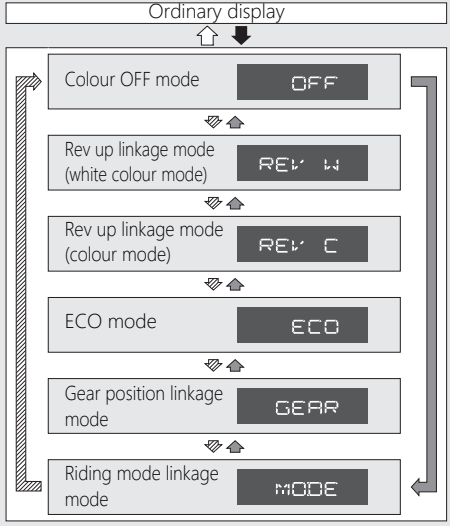
### Multi colour line information setting

You can show the riding conditions by setting the multi colour line information.

Following items can be set sequentially.

- Colour OFF mode
- Rev up linkage mode (white colour mode)
- Rev up linkage mode (colour mode)
- ECO mode
- Gear position linkage mode
- Riding mode linkage mode






➡Press and hold the **SEL** ▲ (up) or the **SEL** ▼ (down) button

⇨Press the **MODE** button

⇘Press the **SEL** ▲ (up) button

➡Press the **SEL** ▼ (down) button



*Continued* 

## Instruments *(Continued)*

Order of priority for the colour:

| | | |
|---|---|---|
| **Rev up linkage mode** | > | **ECO mode**<br>**Gear position linkage mode**<br>**Riding mode linkage mode** |

### Colour OFF mode

All colour mode is deactivated.

### Rev up linkage mode (white colour mode)

When the number of engine revolution reaches shift up point you have set, the colour of the multi colour line blinks in white. This informs you of the indication to shift up.

Ex: When shift up rev setting is 10,000 r/min (rpm) and shift width setting is 200 r/min (rpm).

| multi colour line | r/min (rpm) |
|---|---|
| Blinking | 9,600 |
| Blinking fast | 9,800 |
| Blinking fastest | 10,000 |

**To set the shift up rev setting: P.44**
**To set the shift width setting: P.45**

### Rev up linkage mode (colour mode)

When the number of engine revolution reaches shift up point you have set, the colour of the multi colour line will change. This informs you of the indication to shift up.

Ex: When shift up rev setting is 10,000 r/min (rpm) and shift width setting is 200 r/min (rpm).

| multi colour line | r/min (rpm) |
|---|---|
| Yellow | 9,600 |
| Amber | 9,800 |
| Pink | 10,000 |

**To set the shift up rev setting: P.44**
**To set the shift width setting: P.45**

### ECO mode

Depending on the fuel consumption, the multi colour line will change.
If the fuel consumption is improved, the colour of the multi colour line will change to Aqua. Further, when the fuel consumption is improved, it will turn Green.

► The ECO mode is including shift rev up linkage mode (colour mode).

## Instruments *(Continued)*

### Gear position linkage mode

Depending on the gear position, the multi colour line changes as follows.

| Gear position | 1st | 2nd | 3rd | 4th | 5th | 6th |
|---|---|---|---|---|---|---|
| Colour | Yellow | Pink | Violet | Blue | Aqua | Green |

► The gear position linkage mode is including shift rev up linkage mode (white colour mode).

### Riding mode linkage mode

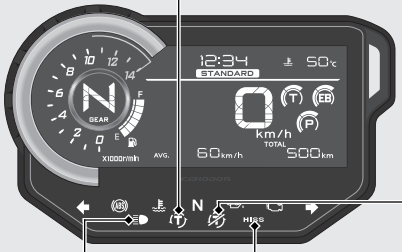
Depending on the riding mode, the multi colour line changes as follows.

| Riding mode | SPORT | STANDARD | RAIN | USER |
|---|---|---|---|---|
| Colour | Pink | Violet | Aqua | Blue |

► The riding mode linkage mode is including shift rev up linkage mode (white colour mode).

# Indicators

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




**Torque Control indicator**

- Comes on when the ignition switch is turned to the | (On) position. Goes off when your speed reaches approximately 5 km/h (3 mph) to indicate Torque Control is ready to work.
- Blinks when Torque Control is operating.

**If it comes on while riding:** P.133

**Torque Control OFF indicator**

Comes on when the Torque Control is turned off.

**HISS indicator** P.129

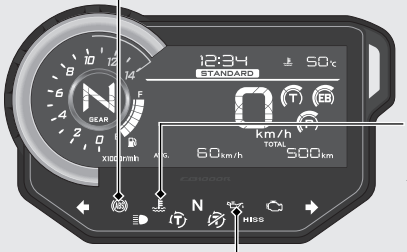
- Comes on briefly when the ignition switch is turned to the | (On) position. Goes off if the ignition key has the correct coding.
- Flashes every 2 seconds for 24 hours when the ignition switch is turned to the ○ (Off) position.

**High beam indicator**



*Continued* 

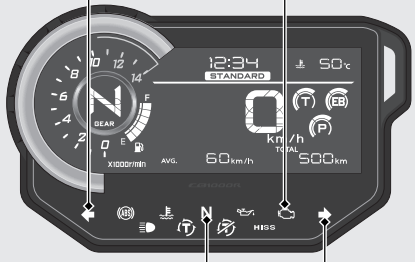
## Indicators *(Continued)*




**ABS (Anti-lock Brake System) indicator**
Comes on when the ignition switch is turned to the | (On) position. Goes off when your speed reaches approximately 10 km/h (6 mph).
**If it comes on while riding:** P.132

**High coolant temperature indicator**
Comes on briefly when the ignition switch is turned to the | (On) position.
**If it comes on while riding:** P.130

**Low oil pressure indicator**
Comes on when the ignition switch is turned to the | (On) position. Goes off when the engine starts.
**If it comes on while engine is running:** P.131




**Left turn signal indicator**

**PGM-FI (Programmed Fuel Injection) malfunction indicator lamp (MIL)**
Comes on briefly when the ignition switch is turned to the | (On) position with the engine stop switch in the ◯ (Run) position. Comes on when the ignition switch is turned to the | (On) position with the engine stop switch in the ⊠ (Stop) position
**If it comes on while engine is running:**
P.131

**Right turn signal indicator**

**N Neutral indicator**
Comes on when the transmission is in Neutral.

# Switches



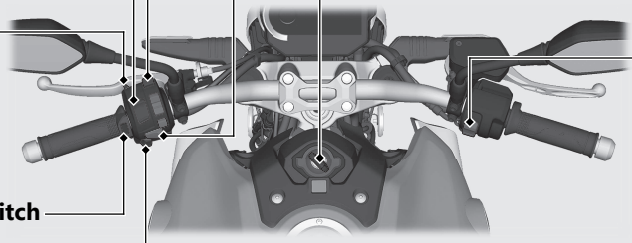
**Headlight dimmer switch/Passing light control switch**

- : High beam
- : Low beam
- PASS : Flashes the high beam headlight.

**Hazard switch**

Switchable when the ignition switch is on.

**Horn button**



**Torque Control switch**

Torque Control level setting and Torque Control on/off.

P.62

**Handle grip heater switch**

II ED, IV ED type

Change the handle grip heater level or turn the handle grip heater on and off. P.59

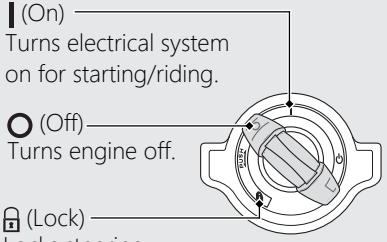
**Turn signal switch**

▶ Pressing the switch turns the turn signal off.

**⏻ Ignition Switch**

Switches the electrical system on/off, locks the steering.

► Key can be removed when in the ○ (Off) or 🔒 (Lock) position.




**Engine stop switch/ Ⓢ Start button**

Should normally remain in the ↻ (Run) position.

► In an emergency, switch to the ⊗ (Stop) position to stop the engine.



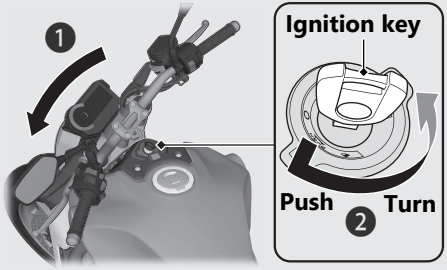
*Continued* 

## Switches *(Continued)*

### Steering Lock

Lock the steering when parking to help prevent theft.

A U-shaped wheel lock or similar device is also recommended.




#### Locking

1. Turn the handlebar all the way to the left.
2. Push the key down, and turn the ignition switch to the (Lock) position.
   - ► Jiggle the handlebar if the lock is difficult to engage.
3. Remove the key.

#### Unlocking

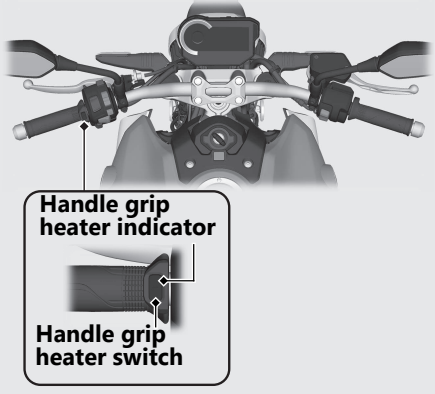
Insert the key, push it in, and turn the ignition switch to the (Off) position.

# Handle Grip Heater

II ED, IV ED type

This motorcycle is equipped with a handle grip heater that warms up your hands during ride.

Wear gloves to protect your hands from the heated grips.




**Handle grip heater indicator:**

Lights when handle grip heater is on.

The selected heater level is indicated by the number of times the indicator blinks when the heater is turned on and the heater level is changed.

For example, If you select heater level 5, the indicator blinks 5 times and repeats it 7 times.

**Heater level:**

The selected heater level is indicated for a few seconds in the clock area, when the handle grip heater switch is operated.

**Handle grip heater status icon:** P.61

Displayed when the handle grip heater is on.

## Handle Grip Heater *(Continued)*

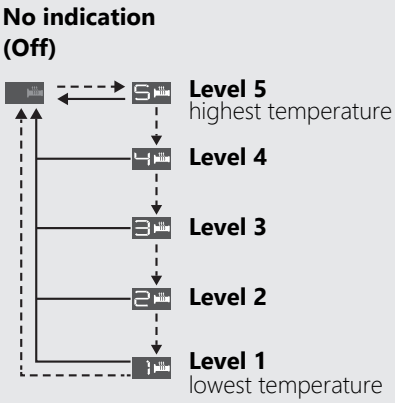
### To operate handle grip heater

1. Start the engine. P.70
2. Press the handle grip heater switch. The handle grip heater is on.
   - ▶ The status icon will be appeared on the display when the handle grip heater operates.
3. Select the heater level by pressing the switch.
   - ▶ The clock on the display automatically switch to the indication of the heater level. The indication will return to the ordinary mode after blinking for about 5 seconds.
   - ▶ Do not leave the handle grip heater in the high position for a long time on a warm day.

### To turn off handle grip heater

Press or press and hold the handle grip heater switch until handle grip heater indicator turns off.

Do not use the handle grip heater with the engine at idle for a long time. It may result in a low (or dead) battery.




Maintains the selected level when the ignition switch is turned to the ○ (Off) position.

▶ The heater level is not changed if the ignition switch is turned to the ○ (Off) position within 5 seconds after heater level changed.

# Honda selectable torque control

Torque Control level (engine power control) can be selected or turned on/off.

- The Torque Control setting can be changed or turned off only when the riding mode is USER. P.64
- Do not operate the Torque Control switch while riding.
  Stop the motorcycle first and the turn off or on and select the desired level.
- The Torque Control setting cannot be changed or turned off when the system is activated (Torque Control indicator flashing).
- Each time the ignition switch is turned to the | (On) position, the Torque Control level will automatically be set to level it was set to. However, if the level was set to off, it will become Low.
- When the Torque Control is turned from the off position to the on position, it will automatically be set to Low.

**Torque Control level setting**

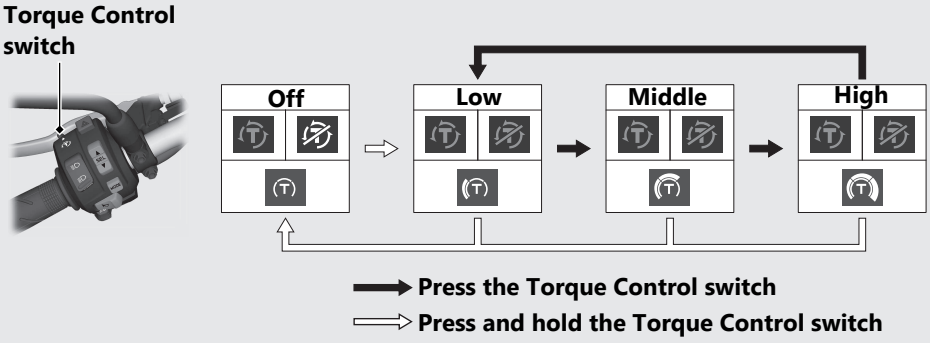
The Torque Control level setting can be done only when the riding mode is USER. P.64
The level can be selected by pressing the Torque Control switch.

- ▶ High is the maximum Torque Control level
- ▶ Low is the minimum Torque Control level

**Torque Control on and off**

Torque Control can be turned on and off by press and hold the Torque Control switch.

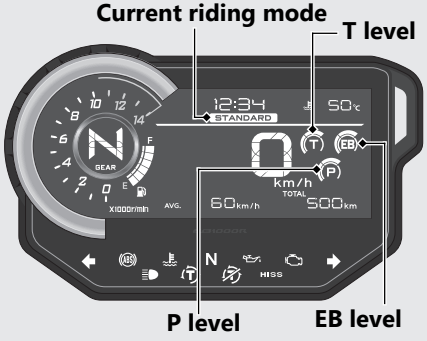




# Riding mode

You can change the riding mode.
The riding mode consists of the following parameters.

P: Engine output level
T: Torque control level
EB: Engine brake level




Riding mode has four modes.
Available riding mode: SPORT, STANDARD, RAIN and USER.

**SPORT, STANDARD and RAIN**

- **SPORT**: This mode is suitable the sports riding. You can feel the highest engine response.
- **STANDARD**: Standard, all-round mode for a variety of situations.
- **RAIN**: Good for stable riding on slippery surfaces such as rainy condition.

Each level can not be changed.

**USER**

Each level can be changed.

## Initial setting

| | P level | T level | EB level |
|---|---|---|---|
| SPORT | High  | Low  | Low  |
| STANDARD | Middle  | Middle  | Middle  |
| RAIN | Low  | High  | Middle  |
| USER | Low*1  | Low*1, 2  | Low*1  |

Notes:
*1 : Level can be changed.
*2 : If off is selected, the level will change to Low the next time the ignition is turned on.

## Riding mode *(Continued)*

**P level (Engine output level)**

P level has three setting levels.

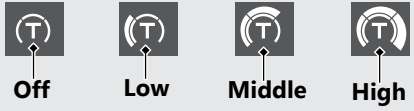
Available setting range: Low to High


► High has the most power.
► Low has the least power.

**T level (Torque control level)**

T level has three setting levels or can be turned off.

Available setting range: off to High




► Low is the minimum Torque Control level.
► High is the maximum Torque Control level.
► Off deactivates the Torque Control.

**EB level (Engine brake level)**

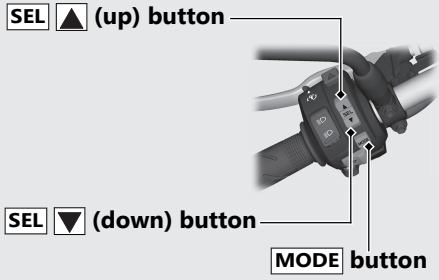
EB level has three setting levels.

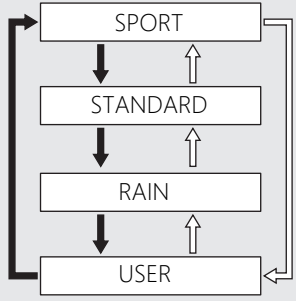
Available setting range: Low to High


► High has the strongest engine braking effect.
► Low has the weakest engine braking effect.

**Selecting the riding mode**

1. Stop the motorcycle.
2. Select the riding mode display. P.25
3. Press the SEL ▲ (up) or SEL ▼ (down) button with the throttle fully closed.




→ Press the SEL ▲ (up) button

⇨ Press the SEL ▼ (down) button

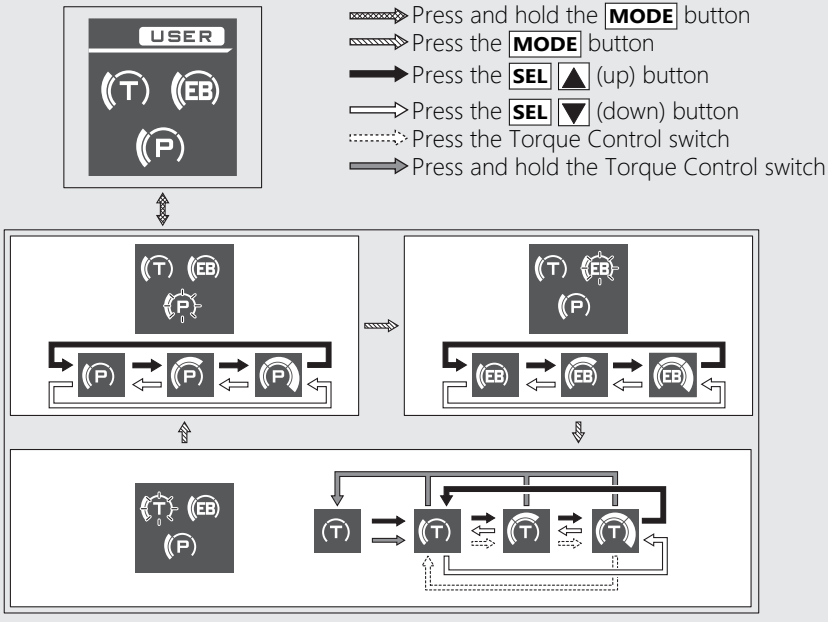
## Riding mode *(Continued)*

### Setting the riding mode

You can change the P, EB and T levels on the USER of the riding mode.

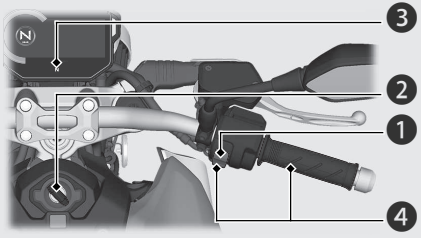
1. Stop the motorcycle.
2. Select the USER in the riding mode . P.67
3. Press and hold the **MODE** button until P display is flashed.
4. Press the **SEL** ▲ (up) or ▼ (down) button until the desired level is displayed.
5. Press the **MODE** button. The P level is set, and EB display is flashed.
6. Press the **SEL** ▲ (up) or ▼ (down) button until the desired level is displayed.
7. Press the **MODE** button. The EB level is set, and T display is flashed.
8. Press the **SEL** ▲ (up) or ▼ (down) button or torque control switch until the desired level is displayed.
   - ▶ T level can be changed to off by pressing and holding the torque control switch.
   - ▶ T level can be changed from off to Low by pressing and holding the torque control switch or pressing the **SEL** ▲ (up) button.
9. Press and hold the **MODE** button until ordinary display is displayed

You can stop setting the riding modes at any time by pressing and holding the **MODE** button.


USER
Press and hold the MODE button
Press the MODE button
Press the SEL ▲ (up) button
Press the SEL ▼ (down) button
Press the Torque Control switch
Press and hold the Torque Control switch

# Starting the Engine

Start your engine using the following procedure, regardless of whether the engine is cold or warm.




NOTICE

- If the engine does not start within 5 seconds, turn the ignition switch to the ○ (Off) position and wait 10 seconds before trying to start the engine again to recover battery voltage.
- Extended fast idling and revving the engine can damage the engine, and the exhaust system.
- Snapping the throttle or fast idling for more than about 5 minutes may cause exhaust pipe discolouration.
- The engine will not start if the throttle is fully open.

1. Make sure the engine stop switch is in the ○ (Run) position.
2. Turn the ignition switch to the | (On) position.
3. Shift the transmission to Neutral ( N indicator comes on). Alternatively, pull in the clutch lever to start your motorcycle with the transmission in gear so long as the side stand is raised.
4. Press the start button with the throttle completely closed.

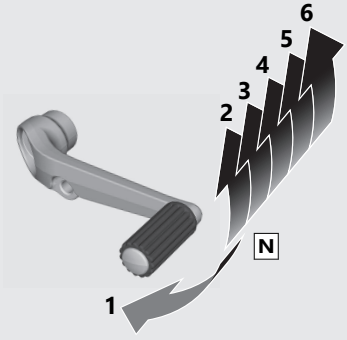
**If the engine does not start:**

① Open the throttle fully and press the start button for 5 seconds.
② Repeat the normal starting procedure.
③ If the engine starts, open the throttle slightly if idling is unstable.
④ If the engine does not start, wait 10 seconds before trying steps ① & ② again.

**If Engine Will Not Start** P.129

# Shifting Gears

Your motorcycle transmission has 6 forward gears in a one-down, five-up shift pattern.




If you put the motorcycle in gear with the side stand down, the engine will shut off.



*Continued* 

## Shifting Gears *(Continued)*

### Quick Shifter

IIED, IV ED type

This system enables very quick up and down shifting without clutch and throttle operations.

- ▶ This system does not function when upshifting with the throttle closed.
- ▶ This system functions when the engine speed is more than 1,350 r/min (rpm) on upshifting or more than the idle speed on downshifting.
- ▶ This system does not function when the clutch lever is being operated.

- If "-" is displayed on the gear position indicator, the Quick Shifter system does not operate.
- If the Quick Shifter does not operate normally, the clutch can be used to complete the shift operation.
- If the PGM-FI malfunction indicator lamp comes on or the gear position indicator flashes "-" in the current gear position, the Quick Shifter system may not operate. If either of the above occurs, contact your dealer as soon as possible.

# Emergency Stop Signal

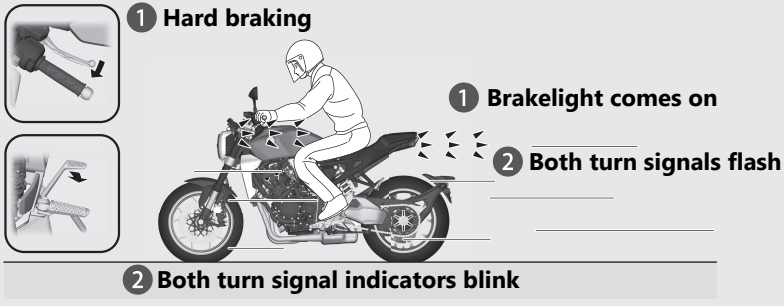
Except KO type

Emergency stop signal activates when you brake hard while driving at 50 km/h (31 mph) or above to alert drivers behind you about sudden braking by rapidly flashing both turn signal lights. This may help to alert drivers behind you to take appropriate means to avoid a possible collision with your motorcycle.

The emergency stop signal stops operating when:

- You release the brake lever and pedal.
- The ABS is deactivated.
- Your motorcycle's decelerating speed becomes moderate.
- You press the hazard switch.

**When the system activates:**



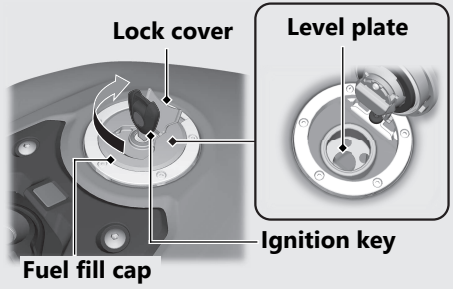



*Continued* 

## Emergency Stop Signal *(Continued)*

- The emergency stop signal is not a system that can prevent a possible rear-end collision caused by your hard braking. It is always recommended to avoid hard braking unless it is absolutely necessary.
- The emergency stop signal does not activate with the hazard switch pressed in.
- If the ABS stops working for a certain period during braking, the emergency stop signal may not activate at all.

# Refuelling




Do not fill with fuel above the level plate.
**Fuel type:** Unleaded petrol only
**Fuel octane number:** Your motorcycle is designed to use Research Octane Number (RON) 91 or higher.
**Tank capacity:** 16.2 L (4.28 US gal, 3.56 Imp gal)

**Refuelling and Fuel Guidelines** P.13

### Opening the Fuel Fill Cap

Open the lock cover, insert the ignition key, and turn it clockwise to open the cap.

### Closing the Fuel Fill Cap

1. After refuelling, push the fuel fill cap closed until it locks.
2. Remove the key and close the lock cover.
   ▶ The key cannot be removed if the cap is not locked.

**⚠WARNING**

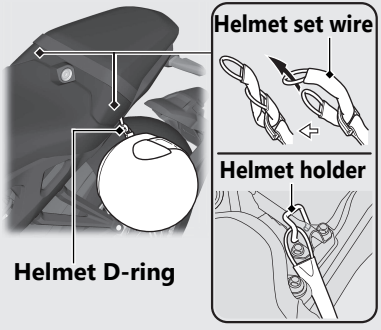
Petrol is highly flammable and explosive. You can be burned or seriously injured when handling fuel.

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

# Storage Equipment

### Helmet Holders

The helmet holders are located under the rear seat.




► Use the helmet holder only when parked.

**Removing the Rear Seat** P.101

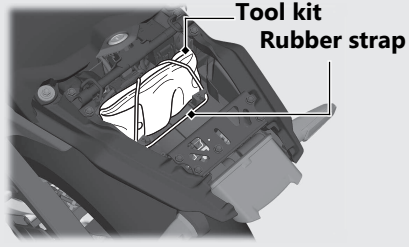
**⚠WARNING**

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.

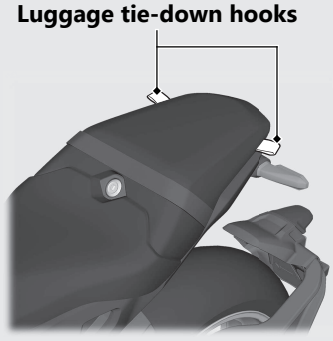
### Tool Kit

The tool kit is located under the rear seat by the rubber strap.



**Document Bag and Luggage Tie-down Hooks**

The document bag and luggage tie-down hooks are located on the underside of the rear seat.


Never use the tie-down hooks to tow or lift the motorcycle.

**Removing the rear seat** P.101

# Maintenance

Please read “Importance of Maintenance” and “Maintenance Fundamentals” carefully before attempting any maintenance. Refer to “Specifications” for service data.

# Importance of Maintenance

## Importance of Maintenance

Keeping your motorcycle well-maintained is absolutely essential to your safety and to protect your investment, obtain maximum performance, avoid breakdowns, and reduce air pollution. Maintenance is the owner's responsibility. Be sure to inspect your motorcycle before each ride, and perform the periodic checks specified in the Maintenance Schedule. P. 80

**⚠WARNING**

Improperly maintaining your 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.

## Maintenance Safety

Always read the maintenance instructions before you begin each task, and make sure that you have the tools, parts, and skills required. 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.

Follow these guidelines when performing maintenance.

- Stop the engine and remove the key.
- Place your motorcycle on a firm, level surface using the side stand to provide support.
- Allow the engine, muffler, brakes, and other high-temperature parts to cool before servicing as you can get burned.
- Run the engine only when instructed, and do so in a well-ventilated area.

# Maintenance Schedule



The maintenance schedule specifies the maintenance requirements necessary to ensure safe, dependable performance, and proper emission control.

Maintenance work should be performed in accordance with Honda's standards and specifications by properly trained and equipped technicians. Your dealer meets all of these requirements. Keep an accurate record of maintenance to help ensure that your motorcycle is properly maintained. Make sure that whomever performs the maintenance completes this record.

All scheduled maintenance is considered a normal owner operating cost and will be charged to you by your dealer. Retain all receipts. If you sell the motorcycle, these receipts should be transferred with the motorcycle to the new owner.

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

## European direct sales, Korea, Australia, New Zealand

| Items | | Pre-ride Check ➡ P. 85 | Frequency*1 | | | | | Annual Check | Regular Replace | Refer to page |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | × 1,000 km | 1 | 12 | 24 | 36 | 48 | | | |
| | | | × 1,000 mi | 0.6 | 8 | 16 | 24 | 32 | | | |
| Fuel Line | 🔧 | | | | I | I | I | I | I | | – |
| Fuel Level | | I | | | | | | | | | 75 |
| Throttle Operation | 🔧 | I | | | I | I | I | I | I | | 119 |
| Air Cleaner *2 | 🔧 | | | | | R | | R | | | 97 |
| Crankcase Breather *3 | | | | | C | C | C | C | | | – |
| Spark Plug | 🔧 | | | | | I | | R | | | – |
| Valve Clearance | 🔧 | | | | | | I | | | | – |
| Engine Oil | | I | | R | R | R | R | R | R | | 105 |
| Engine Oil Filter | | | | R | | R | | R | | | 105 |
| Engine Idle Speed | 🔧 | | | | I | I | I | I | I | | – |
| Radiator Coolant *4 | | I | | | I | I | I | I | I | 3 Years | 107 |
| Cooling System | 🔧 | | | | I | I | I | I | I | | – |
| Secondary Air Supply System | 🔧 | | | | | I | | I | | | – |
| Evaporative Emission Control System | 🔧 | | | | | I | | I | | | – |

**Maintenance Level**

🔧 : Intermediate. We recommend service by your dealer, unless you have the necessary tools and are mechanically skilled. Procedures are provided in an official Honda Shop Manual.

✕🔧 : Technical. In the interest of safety, have your motorcycle serviced by your dealer.

**Maintenance Legend**

I : Inspect (clean, adjust, lubricate, or replace, if necessary)

R : Replace

L : Lubricate

C : Clean



*Continued* 

## Maintenance Schedule

| Items | | Pre-ride Check ➡ P. 85 | Frequency*1 | | | | | | Annual Check | Regular Replace | Refer to page |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | × 1,000 km | 1 | 12 | 24 | 36 | 48 | | | |
| | | | × 1,000 mi | 0.6 | 8 | 16 | 24 | 32 | | | |
| Drive Chain | | I | Every 1,000 km (600 mi): I L | | | | | | | | 113 |
| Drive Chain Slider | | | | | I | I | I | I | | | 115 |
| Brake Fluid *4 | | I | | | I | I | I | I | I | 2 Years | 109 |
| Brake Pads Wear | | I | | | I | I | I | I | I | | 110 |
| Brake System | | | | | I | I | I | I | I | | 85 |
| Brakelight Switch | | | | | I | I | I | I | I | | 111 |
| Headlight Aim | | | | | I | I | I | I | I | | 121 |
| Lights/Horn | | I | | | | | | | | | – |
| Engine Stop Switch | | I | | | | | | | | | – |
| Clutch System | | I | | | I | I | I | I | I | | 116 |
| Side Stand | | I | | | I | I | I | I | I | | 112 |
| Suspension | | | | | I | I | I | I | I | | 123 |
| Nuts, Bolts, Fasteners | | | | | I | I | I | I | I | | – |
| Wheels/Tyres | | I | | | I | I | I | I | I | | 94 |
| Steering Head Bearings | | | | | I | I | I | I | I | | – |

**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 : Replacement requires mechanical skill.

GCC Countries

| Items | | Pre-ride Check ➡ P. 85 | Frequency*1 | | | | | | | | Annual Check | Regular Replace | Refer to page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | × 1,000 km | 1 | 6 | 12 | 18 | 24 | 30 | 36 | | | |
| | | | × 1,000 mi | 0.6 | 4 | 8 | 12 | 16 | 20 | 24 | | | |
| Fuel Line | 🔧 | | | | | I | | I | | I | I | | – |
| Fuel Level | | I | | | | | | | | | | | 75 |
| Throttle Operation | 🔧 | I | | | | I | | I | | I | I | | 119 |
| Air Cleaner *2 | 🔧 | | | | | | R | | | R | | | 97 |
| Crankcase Breather *3 | | | | | C | C | C | C | C | C | | | – |
| Spark Plug | 🔧 | | Every 24,000 km (16,000 mi): I<br>Every 48,000 km (32,000 mi): R | | | | | | | | | | – |
| Valve Clearance | 🔧 | | | | | | | | | I | | | – |
| Engine Oil | | I | | R | | R | | R | | R | R | | 105 |
| Engine Oil Filter | | | | R | | | | R | | | | | 105 |
| Engine Idle Speed | 🔧 | | | | | I | | I | | I | I | | – |
| Radiator Coolant *4 | | I | | | | I | | I | | I | I | 3 Years | 107 |
| Cooling System | 🔧 | | | | | I | | I | | I | I | | – |
| Secondary Air Supply System | 🔧 | | | | | | | I | | | | | – |
| Evaporative Emission Control System | 🔧 | | | | | | | I | | | | | – |

**Maintenance Level**

🔧 : Intermediate. We recommend service by your dealer, unless you have the necessary tools and are mechanically skilled. Procedures are provided in an official Honda Shop Manual.

✕🔧 : Technical. In the interest of safety, have your motorcycle serviced by your dealer.

**Maintenance Legend**

I : Inspect (clean, adjust, lubricate, or replace, if necessary)

R : Replace

L : Lubricate

C : Clean



*Continued*

## Maintenance Schedule

| Items | | Pre-ride Check ➡ P. 85 | Frequency*1 | | | | | | | | Annual Check | Regular Replace | Refer to page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | × 1,000 km | 1 | 6 | 12 | 18 | 24 | 30 | 36 | | | |
| | | | × 1,000 mi | 0.6 | 4 | 8 | 12 | 16 | 20 | 24 | | | |
| Drive Chain | | I | Every 1,000 km (600 mi): I L | | | | | | | | | | 113 |
| Drive Chain Slider | | | | | | I | | I | | I | | | 115 |
| Brake Fluid *4 | | I | | | I | I | I | I | I | I | I | 2 Years | 109 |
| Brake Pads Wear | | I | | | I | I | I | I | I | I | I | | 110 |
| Brake System | | | | | | I | | I | | I | I | | 85 |
| Brakelight Switch | | | | | | I | | I | | I | I | | 111 |
| Headlight Aim | | | | | | I | | I | | I | I | | 121 |
| Lights/Horn | | I | | | | | | | | | | | – |
| Engine Stop Switch | | I | | | | | | | | | | | – |
| Clutch System | | I | | | I | I | I | I | I | I | I | | 116 |
| Side Stand | | I | | | | I | | I | | I | I | | 112 |
| Suspension | | | | | | I | | I | | I | I | | 123 |
| Nuts, Bolts, Fasteners | | | | | | I | | I | | I | I | | – |
| Wheels/Tyres | | I | | | | I | | I | | I | I | | 94 |
| Steering Head Bearings | | | | | | I | | I | | I | I | | – |

**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 : Replacement requires mechanical skill.

# Maintenance Fundamentals

## Pre-ride Inspection

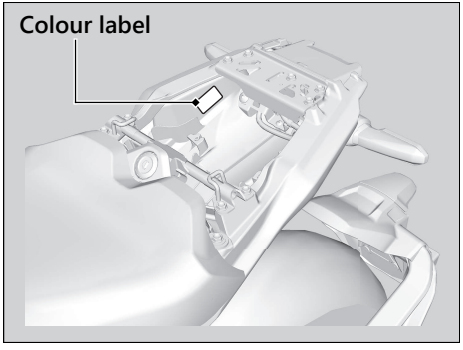
To ensure safety, it is your responsibility to perform a pre-ride inspection and make sure that any problem you find is corrected. A pre-ride inspection is a must, not only for safety, but because having a breakdown, or even a flat tyre, can be a major inconvenience.

Check the following items before you get on your motorcycle:

- Fuel level - Fill fuel tank when necessary. ➔ P. 75
- Throttle - Check for smooth opening and full closing in all steering positions. ➔ P. 119
- Engine oil level - Add engine oil if necessary. Check for leaks. ➔ P. 103
- Coolant level - Add coolant if required. Check for leaks. ➔ P. 107
- Drive chain - Check condition and slack, adjust and lubricate if necessary. ➔ P. 113
- Brakes - Check operation; Front and Rear: check brake fluid level and pads wear. ➔ P. 109, ➔ P. 110
- Lights and horn - Check that lights, indicators and horn function properly.
- Engine stop switch - Check for proper function. ➔ P. 56
- Clutch - Check operation; Adjust freeplay if necessary. ➔ P. 116
- Side stand ignition cut-off system - Check for proper function. ➔ P. 112
- Wheels and tyres - Check condition, air pressure and adjust if necessary. ➔ P. 94

## Replacing Parts

Always use Honda Genuine Parts or their equivalents to ensure reliability and safety.
When ordering coloured components, specify the model name, colour, and code mentioned on the colour label.
The colour label is attached to the under the rear seat. ➡P. 101




## ⚠WARNING

Installing non-Honda parts may make your motorcycle unsafe and cause a crash in which you can be seriously hurt or killed.

Always use Honda Genuine Parts or equivalents that have been designed and approved for your motorcycle.

## Battery

Your motorcycle has a maintenance-free type battery. You do not have to check the battery electrolyte level or add distilled water. Clean the battery terminals if they become dirty or corroded.

Do not remove the battery cap seals. There is no need to remove the cap when charging.

NOTICE

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

This symbol on the battery means that this product must not be treated as household waste.

NOTICE

An improperly disposed of battery can be harmful to the environment and human health. Always confirm local regulations for proper battery disposal instruction.



*Continued* 

### What to do in an emergency

If any of the following occur, immediately see your doctor.

- Electrolyte splashes into your eyes:
  - ▶ Wash your eyes repeatedly with cool water for at least 15 minutes. Using water under pressure can damage your eyes.
- Electrolyte splashes onto your skin:
  - ▶ Remove affected clothing and wash your skin thoroughly using water.
- Electrolyte splashes into your mouth:
  - ▶ Rinse mouth thoroughly with water, and do not swallow.

## ⚠WARNING

The battery gives off explosive hydrogen gas during normal operation.

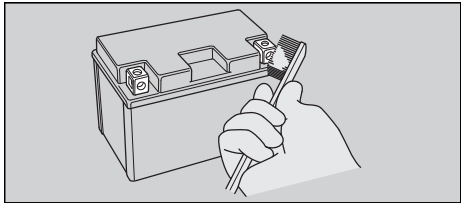
A spark or flame can cause the battery to explode with enough force to kill or seriously hurt you.

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

### Cleaning the Battery Terminals

1. Remove the battery. ➔P. 99
2. If the terminals are starting to corrode and are coated with a white substance, wash with warm water and wipe clean.

**3.** If the terminals are heavily corroded, clean and polish the terminals with a wire brush or sandpaper. Wear safety glasses.



**4.** After cleaning, reinstall the battery.

The battery has a limited life span. Consult your dealer about when you should replace the battery. Always replace the battery with another maintenance-free battery of the same type.

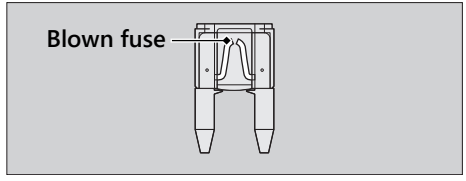
NOTICE
Installing non-Honda electrical accessories can overload the electrical system, discharging the battery and possibly damaging the system.

## Fuses

Fuses protect the electrical circuits on your motorcycle. If something electrical on your motorcycle stops working, check for and replace any blown fuses. P. 146

### Inspecting and Replacing Fuses

Turn the ignition switch to the ○ (Off) position to remove and inspect fuses. If a fuse is blown, replace with a fuse of the same rating. For fuse ratings, see "Specifications." P. 166




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



*Continued*

If a fuse fails repeatedly, you likely have an electrical fault. Have your motorcycle inspected by your dealer.



## Engine Oil

Engine oil consumption varies and oil quality deteriorates according to riding conditions and time elapsed.
Check the engine oil level regularly, and add the recommended engine oil if necessary. Dirty oil or old oil should be changed as soon as possible.

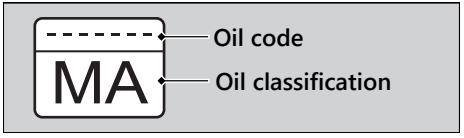
### Selecting the Engine Oil

For recommended engine oil, see "Specifications." P. 165

If you use non-Honda engine oil, check the label to make sure that the oil satisfies all of the following standards:

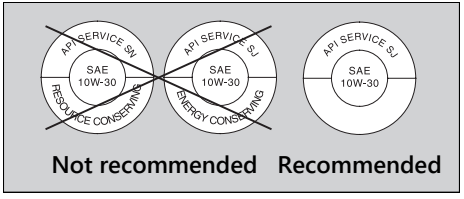
- JASO T 903 standard*1: MA
- SAE standard*2: 10W-30
- API classification*3: SG or higher

*1. The JASO T 903 standard is an index for engine oils for 4-stroke motorcycle engines. There are two classes: MA and MB. For example, the following label shows the MA classification.




*2. The SAE standard grades oils by their viscosity.

*3. The API classification specifies the quality and performance rating of engine oils. Use SG or higher oils, excluding oils marked as "Energy Conserving" or "Resource Conserving" on the circular API service symbol.



## Brake Fluid

Do not add or replace brake fluid, except in an emergency. Use only fresh brake fluid from a sealed container. If you do add fluid, have the brake system serviced by your dealer as soon as possible.

NOTICE

Brake fluid can damage plastic and painted surfaces. Wipe up spills immediately and wash thoroughly.

**Recommended brake fluid:**

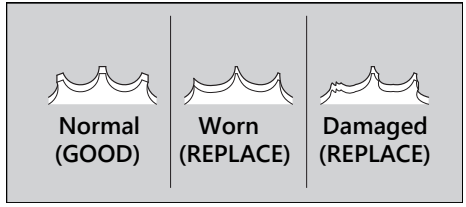
Honda DOT 4 Brake Fluid or equivalent

## Drive Chain

The drive chain must be inspected and lubricated regularly. Inspect the chain more frequently if you often ride on bad roads, ride at high speed, or ride with repeated fast acceleration. P. 113

If the chain does not move smoothly, makes strange noises, has damaged rollers, has loose pins, has missing O-rings, or kinks, have the chain inspected by your dealer.

Also inspect the drive sprocket and driven sprocket. If either has worn or damaged teeth, have the sprocket replaced by your dealer.




NOTICE

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

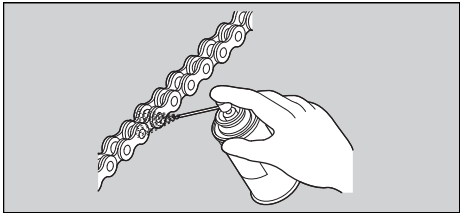


*Continued*

## Cleaning and Lubricating

After inspecting the slack, clean the chain and sprockets while rotating the rear wheel. Use a dry cloth with chain cleaner designed specifically for O-ring chains, or neutral detergent. Use a soft brush if the chain is dirty.
After cleaning, wipe dry and lubricate with the recommended lubricant.

**Recommended lubricant:**
Drive chain lubricant designed specifically for O-ring chains
If not available, use SAE 80 or 90 gear oil.



Do not use a steam cleaner, a high pressure cleaner, a wire brush, volatile solvent such as petrol and benzene, abrasive cleaner, chain cleaner or lubricant NOT designed specifically for O-ring chains as these can damage the rubber O-ring seals.
Avoid getting lubricant on the brakes or tyres.
Avoid applying excess chain lubricant to prevent spray onto your clothes and the motorcycle.

## Recommended Coolant

Pro Honda HP Coolant is a pre-mixed solution of antifreeze and distilled water.

**Concentration:**
50% antifreeze and 50% distilled water

A concentration of antifreeze below 40% will not provide proper corrosion and cold temperature protection.
A concentration of up to 60% will provide better protection in colder climates.

NOTICE
Using coolant not specified for aluminium engines or tap/mineral water can cause corrosion.

## Crankcase Breathers

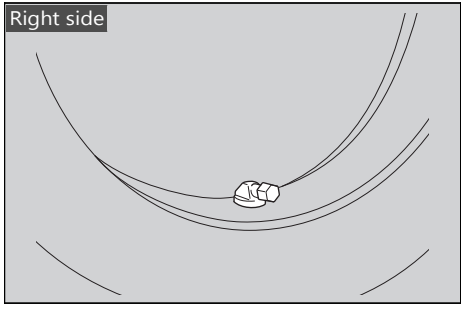
Service more frequently when riding in rain, at full throttle, or after the motorcycle is washed or overturned. Service if the deposit level can be seen in the transparent section of the drain tube.
If the drain tube overflows, the air filter may become contaminated with engine oil causing poor engine performance. P. 120

## Tyres (Inspecting/Replacing)

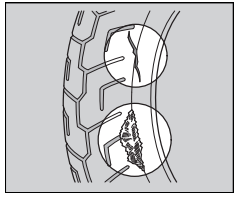
### Checking the Air Pressure

Visually inspect your tyres and use an air pressure gauge to measure the air pressure at least once a month or any time you think the tyres look low. Always check air pressure when your tyres are cold.

Even if the direction of the valve stem is changed, do not return it to the original position. Have your motorcycle inspected by your dealer.

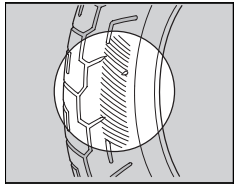



### Inspecting for Damage



Inspect the tyres for cuts, slits, or cracks that exposes fabric or cords, or nails or other foreign objects embedded in the side of the tyre or the tread. Also inspect for any unusual bumps or bulges in the side walls of the tyres.

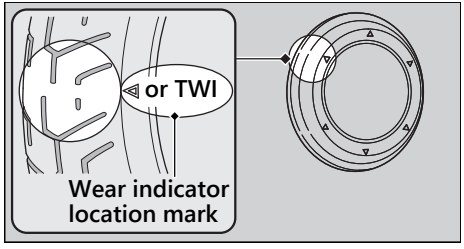
### Inspecting for Abnormal Wear



Inspect the tyres for signs of abnormal wear on the contact surface.

### Inspecting Tread Depth

Inspect the tread wear indicators. If they become visible, replace the tyres immediately. For safe riding, you should replace the tyres when the minimum tread depth is reached.




**⚠WARNING**

Riding on tyres that are excessively worn or improperly inflated can cause a crash in which you can be seriously hurt or killed.

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

Germany

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

Have your tyres replaced by your dealer.
For recommended tyres, air pressure and minimum tread depth, see "Specifications."
P. 165
Follow these guidelines whenever you replace tyres.

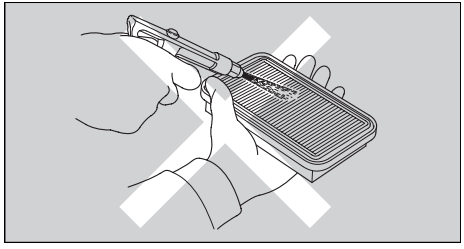
- Use the recommended tyres or equivalents of the same size, construction, speed rating, and load range.
- Have the wheel balanced with Honda Genuine balance weights or equivalent after the tyre is installed.
- Do not install a tube inside a tubeless tyre on this motorcycle. Excessive heat build-up can cause the tube to burst.
- Use only tubeless tyres on this motorcycle. The rims are designed for tubeless tyres, and during hard acceleration or braking, a tube-type tyre could slip on the rim and cause the tyre to rapidly deflate.

**⚠WARNING**

Installing improper tyres on your motorcycle can adversely affect handling and stability, and can cause a crash in which you can be seriously hurt or killed.
Always use the size and type of tyres recommended in this owner's manual.

## Air Cleaner

This motorcycle is equipped with a viscous type air cleaner element.
Air blow cleaning or any other cleaning can degrade the viscous element performance and cause the intake of dust.
Do not perform the maintenance. Should be serviced by your dealer.



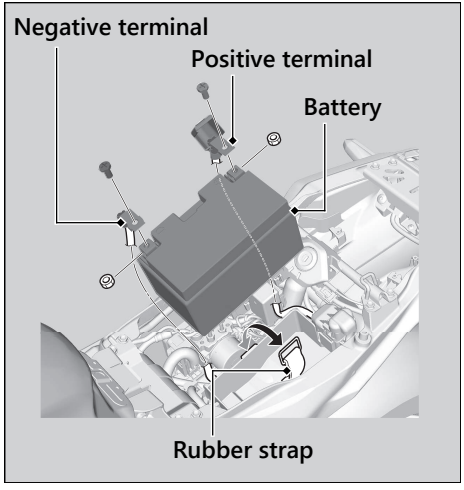
# Tool

The tool kit is stored under the rear seat.
P. 101

You can perform some roadside repairs, minor adjustments and parts replacement with the provided tools.

- Standard/Phillips screwdriver
- Screwdriver handle
- 12 × 14 mm Open end wrench
- 10 × 14 mm Open end wrench
- 6 mm Hex wrench
- Fuse puller
- Pin spanner
- Extension bar
- Helmet set wire
- BFR adjuster

# Battery




## Removal

Make sure the ignition switch is in the ○ (Off) position.

1. Remove the front seat. P. 100
2. Unhook the rubber strap from right side.
3. Disconnect the negative ⊖ terminal from the battery.
4. Disconnect the positive ⊕ terminal from the battery.
5. Remove the battery taking care not to drop the terminal nuts.

## Installation

Install the parts in the reverse order of removal.

Always connect the positive ⊕ terminal first. Make sure that bolts and nuts are tight.

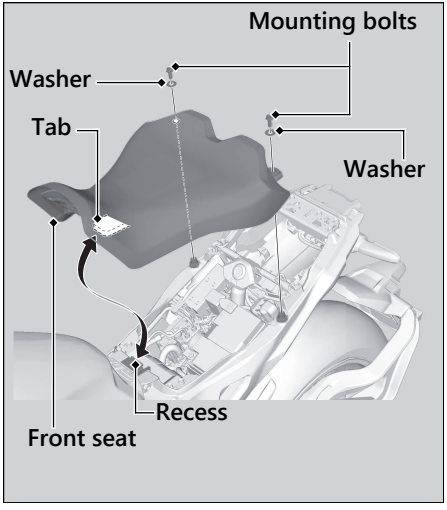
Make sure the clock information is correct after the battery is reconnected. P. 38

For proper handling of the battery, see

"Maintenance Fundamentals." P. 87

"Battery Goes Dead." P. 143

# Front Seat



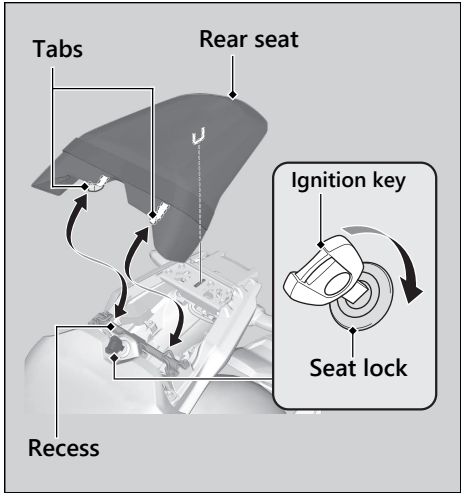

## Removal

1. Remove the rear seat. P. 101
2. Remove the mounting bolts and washers, and then pull the front seat back and up.

## Installation

1. Install the front seat while inserting the tab into the recess.
2. Install the washers and mounting bolts.
3. Tighten the mounting bolts securely. Make sure that the seat is locked securely in position by pulling it up lightly.

# Rear Seat




## Removal

1. Insert the ignition key into the seat lock.
2. Turn the ignition key clockwise, then pull the rear seat up and back.

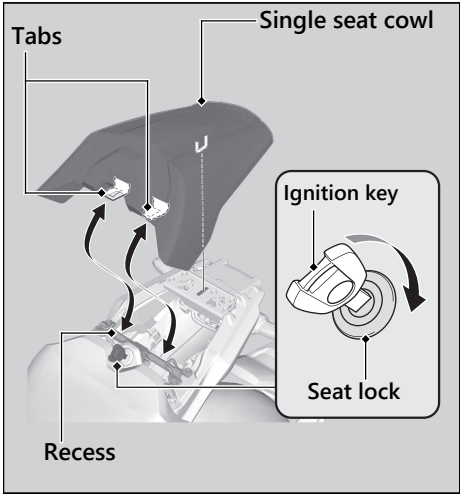
## Installation

1. Insert the tabs into the recess.
2. Push down on the rear of the rear seat.
   ▶ Make sure that the seat is locked securely in position by pulling it up lightly.

The seat locks automatically when closed. Take care not to lock your key in the compartment under the rear seat.

# Single Seat Cowl

II ED, IV ED type only




## Removal

1. Insert the ignition key into the seat lock.
2. Turn the ignition key clockwise, then pull the single seat cowl up and back.

## Installation

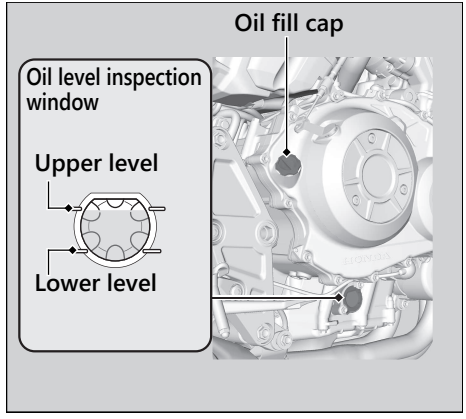
1. Insert the tabs into the recess.
2. Push down on the rear of the single seat cowl.
   ▶ Make sure that the single seat cowl is locked securely in position by pulling it up lightly.

The single seat cowl locks automatically when closed.

Take care not to lock your key in the compartment under the single seat cowl.

## Checking the Engine Oil

1. If the engine is cold, idle the engine for 3 to 5 minutes.
2. Turn the ignition switch to the ○ (Off) position and wait for 2 to 3 minutes.
3. Place your motorcycle in an upright position on a firm, level surface.
4. Check that the oil level is between the upper level and lower level marks on the oil level inspection window.



## Adding Engine Oil

If the engine oil is below or near the lower level mark, add the recommended engine oil.
➡P. 90, ➡P. 165

**1.** Remove the oil fill cap. Add the recommended oil until it reaches the upper level mark.
- ▶ Place your motorcycle in an upright position on a firm, level surface when checking the oil level.
- ▶ Do not overfill above the upper level mark.
- ▶ Make sure no foreign objects enter the oil filler opening.
- ▶ Wipe up any spills immediately.

**2.** Securely reinstall the oil fill cap.

NOTICE

Overfilling with oil or operating with insufficient oil can cause damage to your engine. Do not mix different brands and grades of oil. They may affect lubrication and clutch operation.

For the recommended oil and oil selection guidelines, see "Maintenance Fundamentals."
➡P. 90

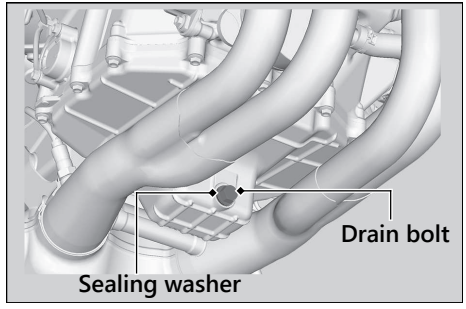
# Changing Engine Oil & Filter

Changing the oil and filter requires special tools. We recommend that you have your motorcycle serviced by your dealer.

Use a new Honda Genuine oil filter or equivalent specified for your model.

NOTICE
Using the wrong oil filter can result in serious damage to the engine.

1. If the engine is cold, idle the engine for 3 to 5 minutes.
2. Turn the ignition switch to the ○ (Off) position and wait for 2 to 3 minutes.
3. Place your motorcycle on a firm, level surface.
4. Place a drain pan under the drain bolt.
5. Remove the oil fill cap, drain bolt, and sealing washer to drain the oil.



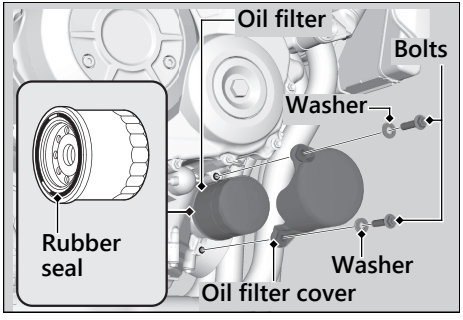



*Continued* 

**6.** Remove the oil filter cover by removing the bolts and washers.

**7.** Remove the oil filter with a filter wrench and let the remaining oil drain out. Make sure the prior seal is not stuck to the engine.

▶ Discard the oil and oil filter at an approved recycling centre.




**8.** Apply a thin coat of engine oil to the rubber seal of a new oil filter.

**9.** Install the new oil filter and tighten.

**Torque:** 26 N·m (2.7 kgf·m, 19 lbf·ft)

**10.** Install a new sealing washer onto the drain bolt. Tighten the drain bolt.

**Torque:** 30 N·m (3.1 kgf·m, 22 lbf·ft)

**11.** Fill the crankcase with the recommended oil (P. 90, P. 165) and install the oil fill cap.

**Required oil**

**When changing oil & engine oil filter:**
3.0 L (3.2 US qt, 2.6 Imp qt)

**When changing oil only:**
2.7 L (2.9 US qt, 2.4 Imp qt)

**12.** Check the oil level. P. 103

**13.** Check that there are no oil leaks.

**14.** Install the parts in the reverse order of removal.

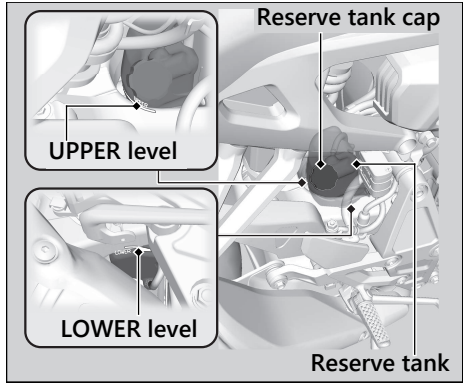
# Coolant

## Checking the Coolant

Check the coolant level in the reserve tank while the engine is cold.

1. Place your motorcycle on a firm, level surface.
2. Hold your motorcycle in an upright position.
3. Check that the coolant level is between the UPPER level and LOWER level marks on the reserve tank.

If the coolant level is dropping noticeably or the reserve tank is empty, you likely have a serious leak. Have your motorcycle inspected by your dealer.




## Adding Coolant

If the coolant level is below the LOWER level mark, add the recommended coolant (P. 93) until the level reaches the UPPER level mark.

Add fluid only from the reserve tank cap and do not remove the radiator cap.

1. Remove the reserve tank cap and add fluid while monitoring the coolant level.
   ▶ Do not overfill above the UPPER level mark.
   ▶ Make sure no foreign objects enter the reserve tank opening.
2. Securely reinstall the reserve tank cap.

**⚠WARNING**

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

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

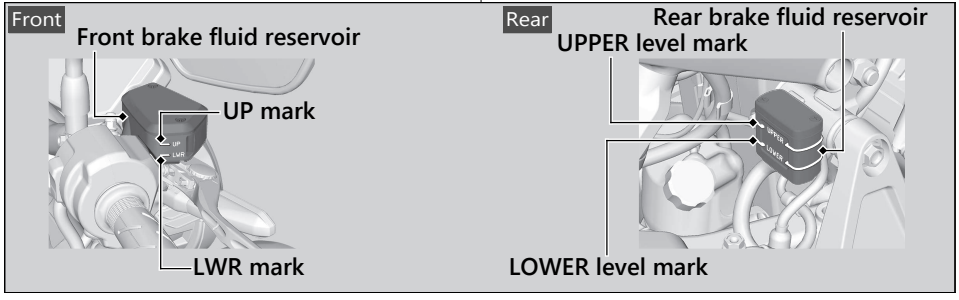
## Changing Coolant

Have your dealer change the coolant unless you have the proper tools and are mechanically qualified.

## Checking Brake Fluid

1. Place your motorcycle in an upright position on a firm, level surface.
2. Front Check that the brake fluid reservoir is horizontal and that the fluid level is between the LWR and UP marks.
   Rear Check that the brake fluid reservoir is horizontal and that the fluid level is between the LOWER level and UPPER level marks.

If the brake fluid level in either reservoir is below the LWR mark or LOWER level mark or the brake lever and pedal freeplay becomes excessive, inspect the brake pads for wear. If the brake pads are not worn, you most likely have a leak. Have your motorcycle inspected by your dealer.

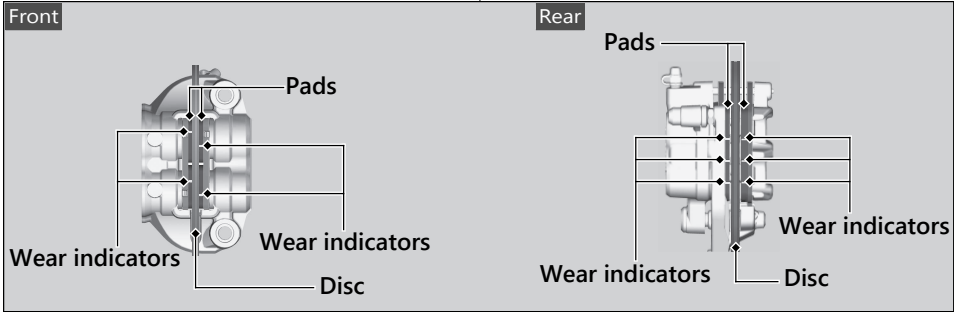


## Inspecting the Brake Pads

Check the condition of the brake pad wear indicators.
The pads need to be replaced if a brake pad is worn to the bottom of the indicator.

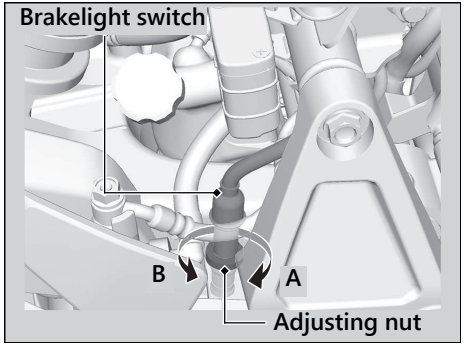
1. Front Inspect the brake pads from in front of the brake caliper.
   ▶ Always inspect both left and right brake calipers.
2. Rear Inspect the brake pads from the right side of the rear tyre.

If necessary have the pads replaced by your dealer.
Always replace both left and right brake pads at the same time.

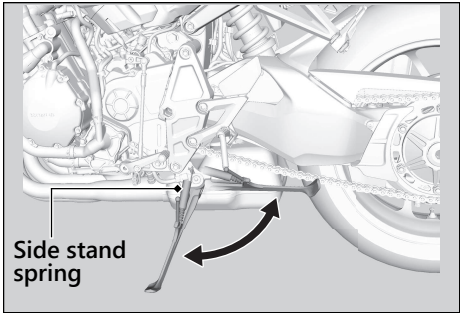


## Adjusting the Brakelight Switch

Check the operation of the brakelight switch. Hold the brakelight switch and turn the adjusting nut in the direction A if the switch operates too late, or turn the nut in the direction B if the switch operates too soon.



## Checking the Side Stand




1. Check that the side stand operates smoothly. If the side stand is stiff or squeaky, clean the pivot area and lubricate the pivot bolt with clean grease.
2. Check the spring for damage or loss of tension.
3. Sit on the motorcycle, shift the transmission to Neutral, and raise the side stand.
4. Start the engine, pull the clutch lever in, and shift the transmission into gear.
5. Lower the side stand all the way. The engine should stop as you lower the side stand. If the engine doesn't stop, have your motorcycle inspected by your dealer.

## Inspecting the Drive Chain Slack

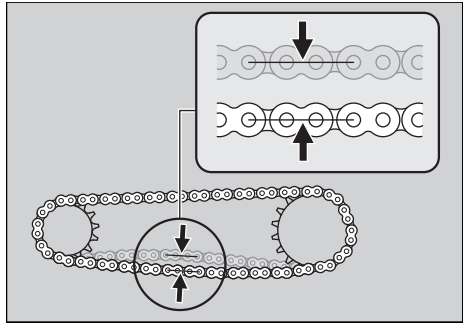
Check the drive chain slack at several points along the chain. If the slack is not constant at all points, some links may be kinked and binding.

Have the chain inspected by your dealer.

1. Shift the transmission to Neutral. Stop the engine.
2. Place your motorcycle on its side stand on a firm, level surface.
3. Check the slack in the lower half of the drive chain midway between the sprockets.

**Drive chain slack:**
40 - 50 mm (1.6 - 2.0 in)

▶ Do not ride your motorcycle if the slack exceeds 50 mm (2.0 in).



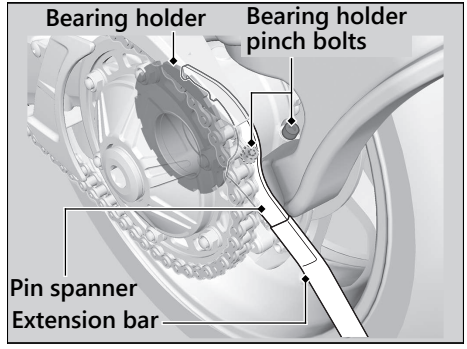
4. Roll the motorcycle forward and check that the chain moves smoothly.
5. Inspect the sprockets. ➡P. 91
6. Clean and lubricate the drive chain. ➡P. 92

## Adjusting the Drive Chain Slack

Adjusting the chain requires special tools.
Have the drive chain slack adjusted by your dealer.
When adjusting the drive chain slack, be careful not to damage the wheel speed sensor and pulser ring.

1. Shift the transmission to Neutral. Stop the engine.
2. Place your motorcycle on its side stand on a firm, level surface.
3. Support your motorcycle securely and raise the rear wheel off the ground using a hoist.
4. Loosen the bearing holder pinch bolts.
5. Turn the bearing holder clockwise or counterclockwise to obtain the proper chain slack with the pin spanner and extension bar provided in the tool kit. P. 98
6. Check the drive chain slack. P. 113
7. Tighten the bearing holder pinch bolts to the specified torque.

**Torque:** 27 N·m (2.8 kgf·m, 20 lbf·ft)




8. Recheck drive chain slack.

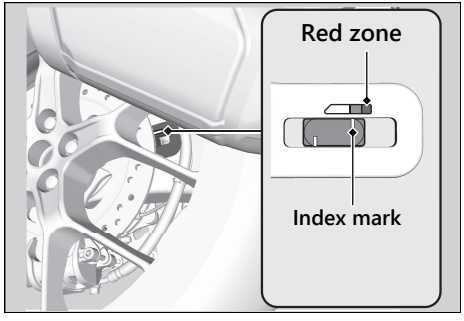
If a torque wrench was not used for installation, see your dealer as soon as possible to verify proper assembly.
Improper assembly may lead to loss of braking capacity.

## Checking the Drive Chain Wear

Check the chain wear label when adjusting the drive chain. If the index mark aligns with the red zone on the label after the chain has been adjusted to the proper slack, the chain is excessively worn and must be replaced.

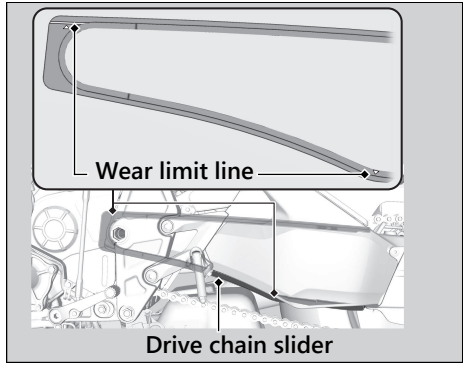
**Chain:** RK525ROZ7

If necessary have the drive chain replaced by your dealer.




# Checking the Drive Chain Slider

Check the condition of the drive chain slider. The drive chain slider will need to be replaced if the chain slider is worn to the wear limit line.
If necessary have the drive chain slider replaced by your dealer.

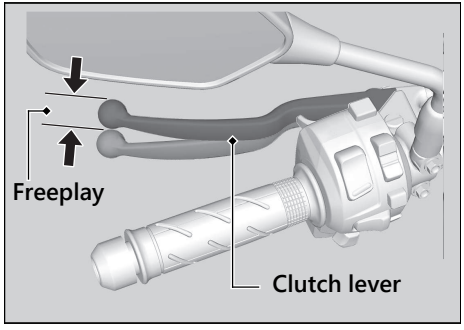


# Checking the Clutch

## Checking the Clutch Lever Freeplay

Check the clutch lever freeplay.

**Freeplay at the clutch lever:**
10 - 20 mm (0.4 - 0.8 in)




Check the clutch cable for kinks or signs of wear. If necessary have it replaced by your dealer.

Lubricate the clutch cable with a commercially available cable lubricant to prevent premature wear and corrosion.

NOTICE

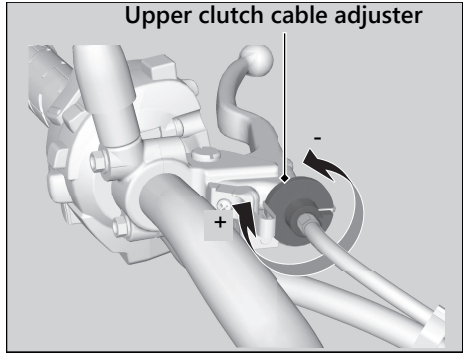
Improper freeplay adjustment can cause premature clutch wear.

# Adjusting the Clutch Lever Freeplay

## Upper Adjustment

Attempt adjustment with the upper clutch cable adjuster first.

Turn the clutch cable adjuster until the freeplay is 10 - 20 mm (0.4 - 0.8 in).



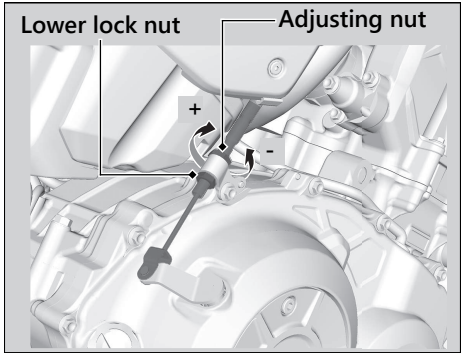



*Continued* 

## Lower Adjustment

If the upper clutch cable adjuster is threaded out near its limit, or the correct freeplay cannot be obtained, attempt adjustment with the lower clutch cable adjusting nut.

1. Turn the upper clutch cable adjuster all the way in (to provide maximum freeplay).
2. Loosen the lower lock nut.
3. Turn the adjusting nut until the clutch lever freeplay is 10 - 20 mm (0.4 - 0.8 in).
4. Tighten the lower lock nut and check the clutch lever freeplay.
5. Start the engine, pull the clutch lever in, and shift into gear. Make sure the engine does not stall and the motorcycle does not creep. Gradually release the clutch lever and open the throttle. Your motorcycle should move smoothly and accelerate gradually.

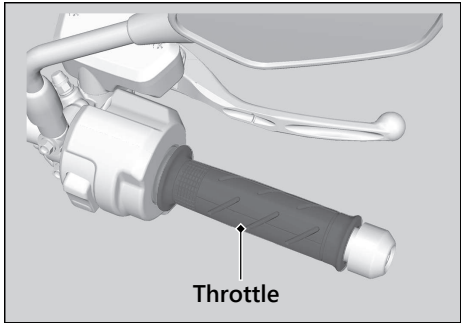



If proper adjustment cannot be obtained or the clutch does not work correctly, see your dealer.

# Throttle

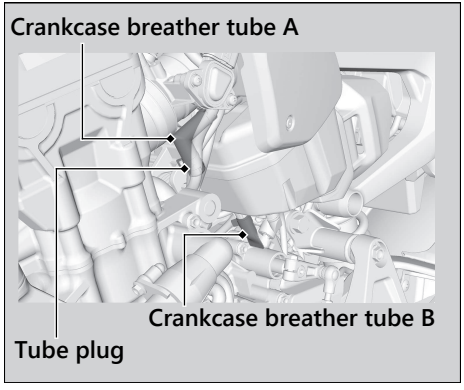
## Checking the Throttle

With the engine off, check that the throttle rotates smoothly from fully closed to fully open. If the throttle does not move smoothly, close automatically, have the motorcycle inspected by your dealer.



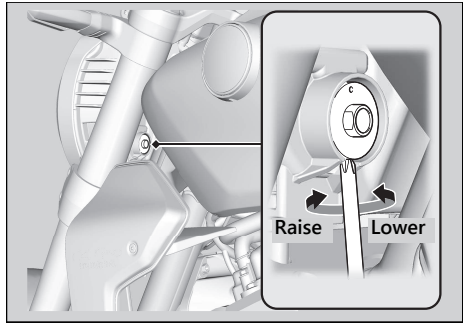
## Cleaning the Crankcase Breather

1. Place a suitable container under the crankcase breather tubes.
2. Remove the tube plug from the crankcase breather tube A.
3. Drain deposits into a suitable container.
4. Reinstall the tube plug.
5. Remove the crankcase breather tube B and drain deposits.
6. Reinstall the crankcase breather tube B.



## Adjusting the Headlight Aim

You can adjust vertical aim of the headlight for proper alignment. Turn the pinion in or out as necessary using provided Phillips screwdriver. P. 98.
Obey local laws and regulations.



# Adjusting the Brake Lever

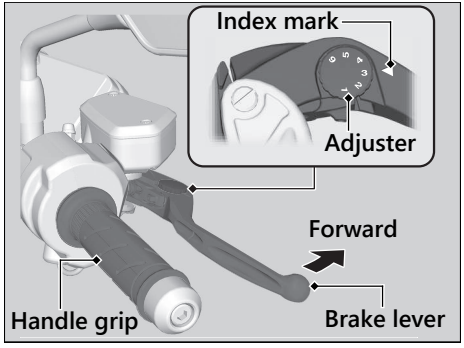
You can adjust the distance between the tip of the brake lever and handle grip.

## Adjustment method

Turn the adjuster until the numbers align with the index mark while pushing the lever forward in the desired position.

After adjustment, check that the lever operates correctly before riding.

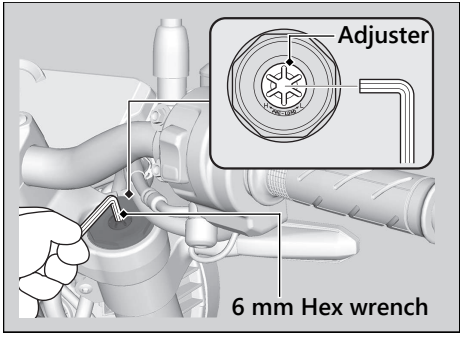
NOTICE
Do not turn the adjuster beyond its natural limit.



# Adjusting the Front Suspension

## Spring Preload

You can adjust the spring preload by the adjuster to suit the load or the road surface. Turn the adjuster using the 6 mm Hex wrench provided in the tool kit. P. 98
The spring preload adjuster has 20 turns. Turn clockwise to increase spring preload (hard), or turn counterclockwise to decrease spring preload (soft). The standard position is the 7 turns from the full soft position.




NOTICE
Do not turn the adjuster beyond its limits.



*Continued* 

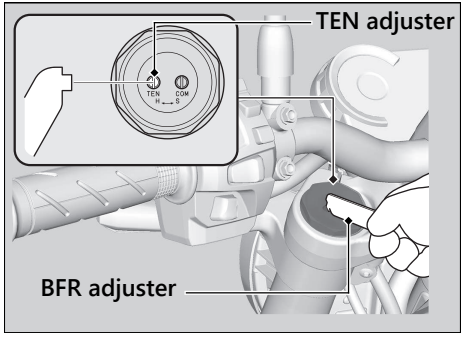
## Rebound Damping

You can adjust the rebound damping by the TEN adjuster to suit the load or the road surface.

Turn the adjuster using the BFR adjuster provided in the tool kit. P. 98

The TEN adjuster has 5 1/2 turns.

Turn clockwise to increase rebound damping (hard), or turn counterclockwise to decrease rebound damping (soft). The standard position is 5 turns from the full hard position.




NOTICE

Do not turn the adjuster beyond its limits.

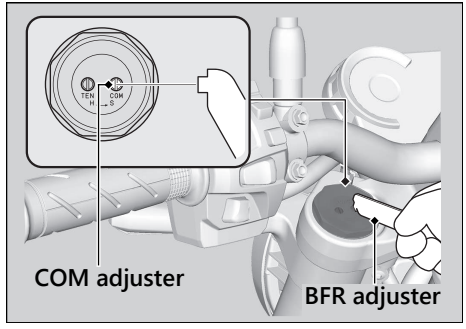
## Compression Damping

You can adjust the compression damping by the COM adjuster to suit the load or the road surface.

Turn the adjuster using the BFR adjuster provided in the tool kit. ➡P. 98

The COM adjuster has 7 turns.

Turn clockwise to increase compression damping (hard), or turn counterclockwise to decrease compression damping (soft). The standard position is 5 3/4 turns from the full hard position.



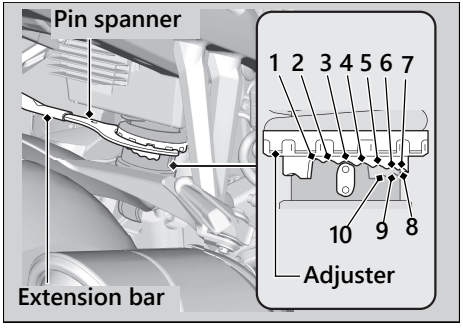

NOTICE

Do not turn the adjuster beyond its limits.

# Adjusting the Rear Suspension

## Spring Preload

You can adjust the spring preload by the adjuster to suit the load or the road surface. Turn the adjuster using the pin spanner and extension bar provided in the tool kit. P. 98 The preload adjuster has 10 positions. Positions 1 to 2 are for a decrease spring preload (soft), or turn the position 4 to 10 increase spring preload (hard). The standard position is 3.




NOTICE

Do not turn the adjuster beyond its limits. Attempting to adjust directly from 1 to 10 or 10 to 1 may damage the shock absorber.

NOTICE

The rear shock absorber damper unit contains high pressure nitrogen gas. Do not attempt to disassemble, service, or improperly dispose of the damper. See your dealer.

## Rebound Damping

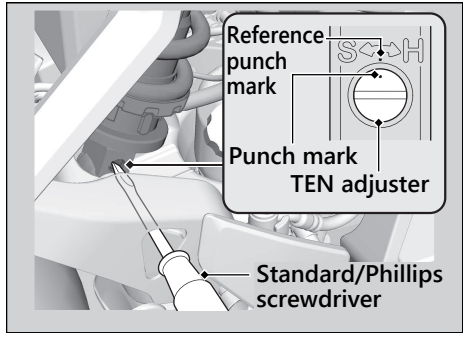
You can adjust the rebound damping by the TEN adjuster to suit the load or the road surface.

Turn the adjuster using the Standard/Phillips screwdriver provided in the tool kit. P. 98

The TEN adjuster has 3 turns.

Turn clockwise to increase rebound damping (hard), or turn counterclockwise to decrease rebound damping (soft).

The standard position is 1 3/4 turns from the full hard position so that the punch mark on the adjuster aligns with the reference punch mark.




NOTICE

Do not turn the adjuster beyond its limits.

NOTICE

The rear shock absorber damper unit contains high pressure nitrogen gas. Do not attempt to disassemble, service, or improperly dispose of the damper. See your dealer.

# Troubleshooting

# Engine Will Not Start (HISS indicator stays on)

## Starter Motor Operates But Engine Does Not Start

Check the following items:

- Check the correct engine starting sequence. ➡ P. 70
- Check that there is petrol in the fuel tank.
- Check if the PGM-FI malfunction indicator lamp (MIL) is on.
  - ▶ If the indicator lamp is on, contact your dealer as soon as possible.
- Check if the HISS indicator stays on.
  - ▶ Turn the ignition switch to the ○ (Off) position and remove the key. Reinsert the key and turn the ignition switch to the | (On) position. If the indicator still stays on, check the following:
    Check if there is no another HISS key (including spare key) close to the ignition switch.
    Check if there are no any metallic seals or stickers on the key.
    If the HISS indicator still stays on, have your motorcycle inspected by your dealer.

## Starter Motor Does Not Operate

Check the following items:

- Check the correct engine starting sequence. ➡ P. 70
- Make sure engine stop switch is in the ⟳ (Run) position. ➡ P. 56
- Check for a blown fuse. ➡ P. 146
- Check for a loose battery connection (➡ P. 99) or battery terminal corrosion (➡ P. 87).
- Check the condition of the battery. ➡ P. 143

If the problem continues, have your motorcycle inspected by your dealer.

# Overheating (High coolant temperature indicator is on)

The engine is overheating when the following occurs:

- High coolant temperature indicator comes on.
- Acceleration becomes sluggish.
  If this occurs, pull safely to the side of the road and perform the following procedure.

Extended fast idling may cause the high coolant temperature indicator to come on.

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

1. Stop the engine using the ignition switch, and then turn the ignition switch to the ❙ (On) position.
2. Check that the radiator fan is operating, and then turn the ignition switch to the ○ (Off) position.
   If the fan is not operating:
   Suspect a fault. Do not start the engine. Transport your motorcycle to your dealer.
   If the fan is operating:
   Allow the engine to cool with the ignition switch in the ○ (Off) position.
3. After the engine has cooled, inspect the radiator hose and check if there is a leak. ➔P. 107
   If there is a leak:
   Do not start the engine. Transport your motorcycle to your dealer.
4. Check the coolant level in the reserve tank. ➔P. 107
   ► Add coolant as necessary.
5. If 1-4 check normal, you may continue riding, but closely monitor the high coolant temperature indicator.

## Low Oil Pressure Indicator

If the low oil pressure indicator comes on, pull safely to the side of the road and stop the engine.

NOTICE
Continuing to ride with low oil pressure can cause serious damage to the engine.

1. Check the engine oil level, and add oil as necessary. P. 103, P. 104
2. Start the engine.
   ▶ Only continue riding if the low oil pressure indicator goes off.

Rapid acceleration may momentarily cause the low oil pressure indicator to come on, especially if the oil is at or near the low level. If the low oil pressure indicator stays on when the oil level is at the proper level, stop the engine and contact your dealer.

If the engine oil level goes down rapidly, your motorcycle may have a leak or another serious problem. Have your motorcycle inspected by your dealer.

## PGM-FI (Programmed Fuel Injection) Malfunction Indicator Lamp (MIL)

If the indicator comes on while riding, you may have a serious problem with the PGM-FI system. Reduce speed and have your motorcycle inspected by your dealer as soon as possible.

# ABS (Anti-lock Brake System) Indicator

If the indicator operates in one of the following ways, you may have a serious problem with the ABS. Reduce your speed and have your motorcycle inspected by your dealer as soon as possible.

- Indicator comes on or starts flashing while riding.
- Indicator does not come on when the ignition switch is in the | (On) position.
- Indicator does not go off at speeds above 10 km/h (6 mph).

If the ABS indicator stays on, your brakes will continue to work as a conventional system, but without the anti-locking function.

The ABS indicator may flash if you turn the rear wheel while your motorcycle is lifted off the ground. In this case, turn the ignition switch to the ○ (Off) position, and then to the | (On) position again. The ABS indicator will go off after your speed reaches 30 km/h (19 mph).

## Torque Control Indicator

If the indicator operates in one of the following ways, you may have a serious problem with the Torque Control. Reduce your speed and have your motorcycle inspected by your dealer as soon as possible.

- Indicator comes and stays on (solid) while riding.
- Indicator does not come on when the ignition switch is turned to the | (On) position.
- Indicator does not go off at speeds above 5 km/h (3 mph).

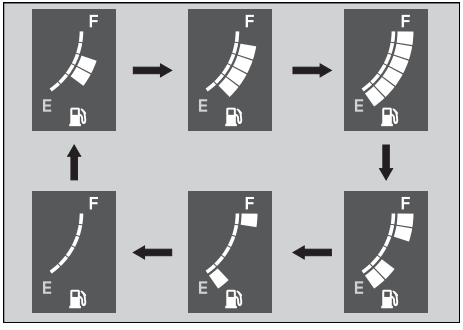
Even when the Torque Control indicator is on, your motorcycle will have normal riding ability without Torque Control function.

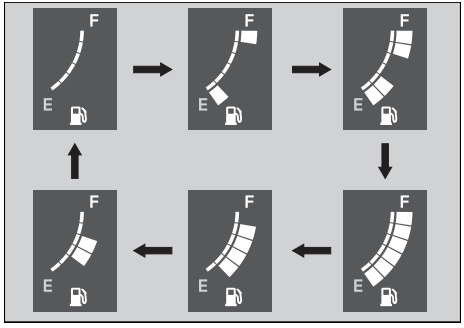
▶ When the indicator comes on while the Torque Control is in operation, you will have to completely close the throttle to regain normal riding ability.

The Torque Control indicator may come on if you rotate the rear wheel while your motorcycle is lifted off the ground. In this case, turn the ignition switch to the ○ (Off) position, and then to the | (On) position again. The Torque Control indicator will go off after your speed reaches 5 km/h (3 mph).

## Fuel Gauge Failure Indication

If the fuel system has an error, the fuel gauge indicators will be displayed as shown in the illustrations.
If these occur, see your dealer as soon as possible.

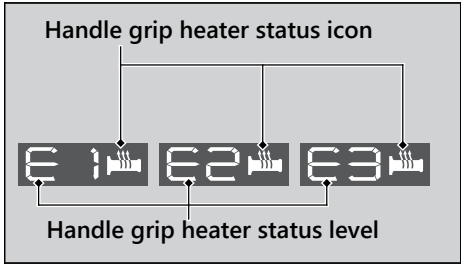


# Handle Grip Heater Failure Indication

II ED, IV ED type

If the handle grip heater system has an error, the handle grip heater status icon will blink. If the "E1", "E2" or "E3" blinking does not go off, see your dealer as soon as possible.



# Tyre Puncture

Repairing a puncture or removing a wheel requires special tools and technical expertise. We recommend you have this type of service performed by your dealer.
After an emergency repair, always have the tyre inspected/replaced by your dealer.



## Emergency Repair Using a Tyre Repair Kit

If your tyre has a minor puncture, you can make an emergency repair using a tubeless tyre repair kit.
Follow the instructions provided with the emergency tyre repair kit.
Riding your motorcycle with a temporary tyre repair is very risky. Do not exceed 50 km/h (30 mph). Have the tyre replaced by your dealer as soon as possible.

**⚠WARNING**

Riding your motorcycle with a temporary tyre 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 tyre repair, ride slowly and carefully and do not exceed 50 km/h (30 mph) until the tyre is replaced.

## Removing Wheels

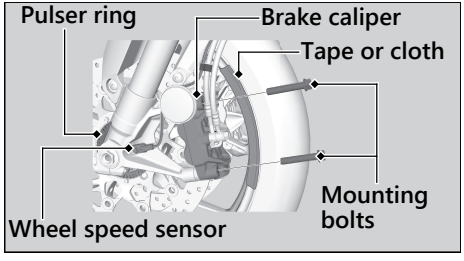
Follow these procedures if you need to remove a wheel in order to repair a puncture.

When removing and installing the wheel, be careful not to damage the wheel speed sensor and pulser ring.

## Front Wheel

### Removal

1. Place your motorcycle on a firm, level surface.
2. Cover the both sides of the front wheel and brake caliper with protective tape or cloth.

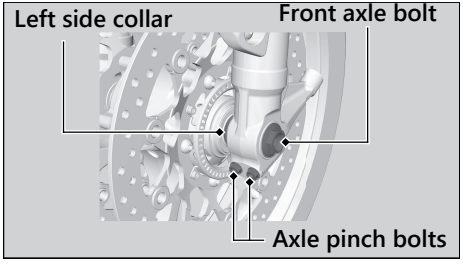



3. On the right side, remove the mounting bolts and remove the brake caliper.
4. On the left side, remove the mounting bolts and remove the brake caliper.
   - ▶ Support the brake caliper assembly so that it doesn't hang from the brake hose. Do not twist the brake hose.
   - ▶ Avoid getting grease, oil, or dirt on the disc or pad surfaces.
   - ▶ Do not pull the front brake lever while the brake caliper is removed.
   - ▶ Take care to prevent the brake caliper from scratching the wheel during removal.

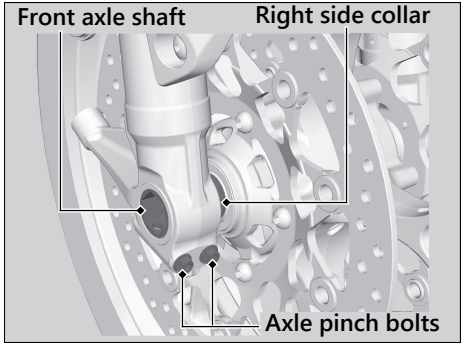


*Continued* 

5. Remove the front axle bolt.
6. Loosen the left axle pinch bolts.
7. Support your motorcycle securely and raise the front wheel off the ground using a maintenance stand or a hoist.

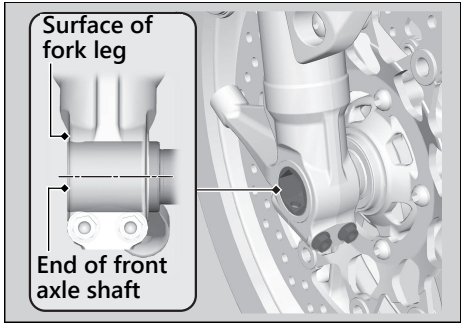



8. Loosen the right axle pinch bolts.
9. On the right side, withdraw the front axle shaft, and remove the side collars and wheel.



**Installation**

1. Attach the side collars to the wheel.
2. On the right side, place the wheel between the fork legs and insert the lightly greased front axle shaft to the end, through the right fork leg and wheel hub.
3. Align the end of the front axle shaft with the surface of the fork leg.




4. Tighten the right axle pinch bolts to hold the axle.
5. Install and tighten the axle bolt.

| **Torque:** 79 N·m (8.1 kgf·m, 58 lbf·ft) |
|---|

6. Loosen the right axle pinch bolts.
7. Tighten the left axle pinch bolts.

| **Torque:** 22 N·m (2.2 kgf·m, 16 lbf·ft). |
|---|

8. Install the right brake caliper and tighten the mounting bolts.

| **Torque:** 45 N·m (4.6 kgf·m, 33 lbf·ft). |
|---|

9. Install the left brake caliper and tighten the mounting bolts.

| **Torque:** 45 N·m (4.6 kgf·m, 33 lbf·ft). |
|---|

▶ Take care to prevent the brake caliper from scratching the wheel during installation.

▶ Use new mounting bolts when installing the brake caliper.



*Continued*

NOTICE
When installing a wheel or caliper into original position, carefully fit the brake disc between the pads to avoid scratching them.

**10.** Lower the front wheel on the ground.
**11.** Apply the brake lever several times. Then, pump the fork several times.
**12.** Retighten the right axle pinch bolts.

**Torque:** 22 N·m (2.2 kgf·m, 16 lbf·ft).

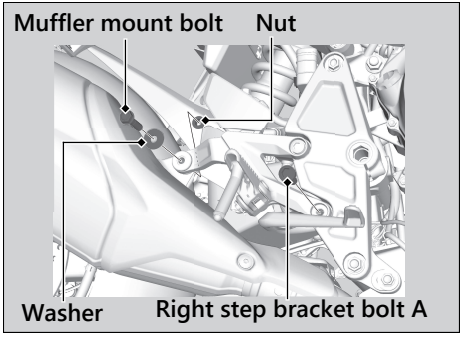
**13.** Raise the front wheel off the ground again, and check that the wheel rotates freely after you release the brake.
**14.** Uncover the protective tape or cloth.

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

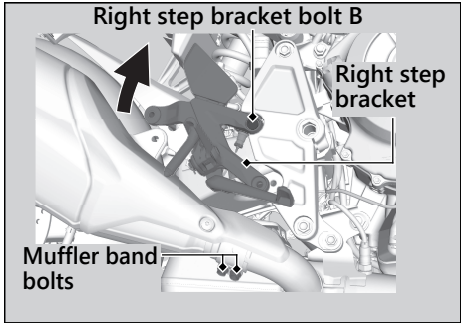
## Rear Wheel

### Removal

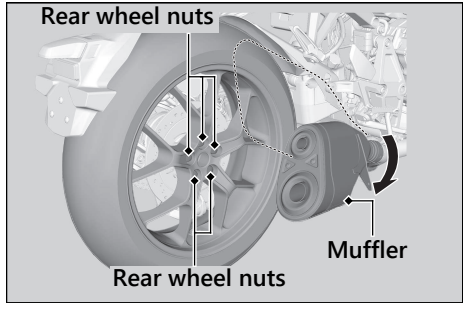
**1.** Place your motorcycle on a firm, level surface.
**2.** Loosen the rear wheel nuts.
**3.** Support your motorcycle securely and raise the rear wheel off the ground using a hoist.
**4.** Remove the muffler mount bolt, washer and nut.
**5.** Remove the right step bracket bolt A.



**6.** Loosen the right step bracket bolt B and muffler band bolts and then, lift up the right step bracket upward.




**7.** Turn the muffler clockwise, and remove the rear wheel by removing the rear wheel nuts.






*Continued* 

**Installation**

1. To install the rear wheel, reverse the removal procedure.
2. Install the rear wheel and tighten the rear wheel nuts equally.

| **Torque:** 108 N·m (11.0 kgf·m, 80 lbf·ft). |
|---|

3. Turn the muffler counterclockwise until its original position.
4. Tighten the muffler band bolts.

| **Torque:** 22 N·m (2.2 kgf·m, 16 lbf·ft). |
|---|

5. Install the step bracket bolt A.
6. Tighten the right step bracket bolt A and B.

| **Torque:** 37 N·m (3.8 kgf·m, 27 lbf·ft). |
|---|

7. Install the muffler mount bolt, washer, and nut and tighten it.

| **Torque:** 22 N·m (2.2 kgf·m, 16 lbf·ft). |
|---|

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

# Electrical Trouble

## Battery Goes Dead

Charge the battery using a motorcycle battery charger.
Remove the battery from the motorcycle before charging.

Do not use an automobile-type battery charger, as these can overheat a motorcycle battery and cause permanent damage. If the battery does not recover after recharging, contact your dealer.

NOTICE
Jump starting using an automobile battery can damage your motorcycle's electrical system and is not recommended.

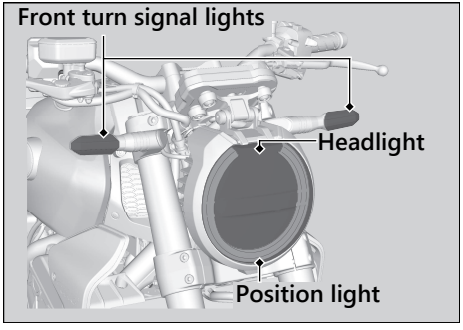
## Burned-out Light Bulb

All light bulbs on the motorcycle are LEDs. If there is a LED which is not turned on, see your dealer for servicing.



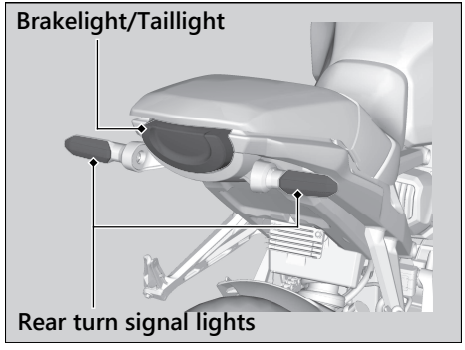
*Continued*

## Headlight/Position Light/Front Turn Signal Lights



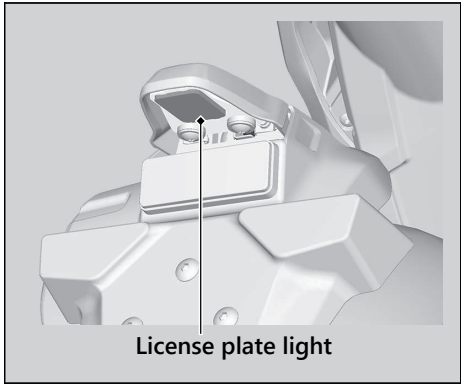

The headlight, position light and front turn signal lights use several LEDs.
If there is a LED which is not turned on, see your dealer for servicing.

## Brakelight/Taillight/Rear Turn Signal Lights




The brakelight, taillight and rear turn signal lights use several LEDs.
If there is a LED which is not turned on, see your dealer for servicing.

## License Plate Light




The license plate light uses a LED.
If there is a LED which is not turned on, see your dealer for servicing.

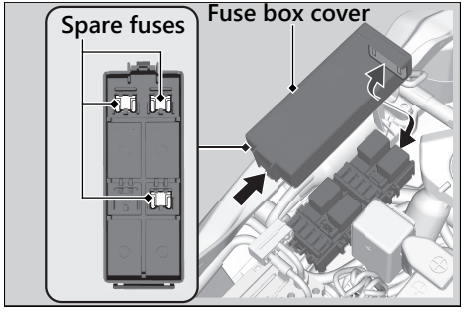
# Blown Fuse

Before handling fuses, see "Inspecting and Replacing Fuses." ➡P. 89

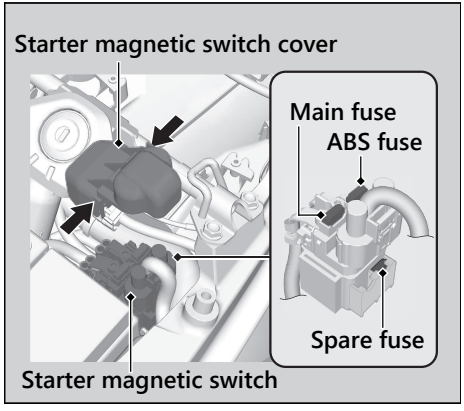


## Fuse Box Fuses

1. Remove the front seat. ➡P. 100
2. Remove the fuse box cover.
3. Pull the fuses out one by one with the fuse puller in the tool kit and check for a blown fuse. Always replace a blown fuse with a spare fuse of the same rating.
4. Reinstall the fuse box cover.
5. Reinstall the front seat.



## Main Fuse & ABS Fuse




1. Remove the front seat. P. 100
2. Disconnect the negative ⊖ terminal from the battery. P. 99
3. Remove the starter magnetic switch cover.
4. Pull the main fuse and ABS fuse out one by one and check for a blown fuse. Always replace a blown fuse with a spare fuse of the same rating.
   ▶ Spare fuse is provided in the starter magnetic switch.
5. Reinstall parts in the reverse order of removal.

NOTICE

If a fuse fails repeatedly, you likely have an electrical problem. Have your motorcycle inspected by your dealer.

# Information

# Keys

## Ignition Key

This motorcycle has two ignition keys and a key tag with a key number and a bar code.

The ignition key contains a special coded chip that is recognized by the immobilizer system (HISS) in order to start the engine. Handle the key carefully to prevent damaging the HISS components.

- Do not bend keys or subject them to undue stress.
- Avoid prolonged exposure to sunlight or high temperatures.
- Do not grind, drill or in any way alter their shape.
- Do not expose to strong magnetic objects.

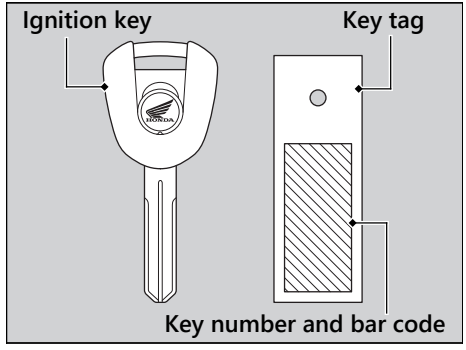
If you lose all ignition keys and the key tag, the PGM-FI unit/ignition control module must be replaced by your dealer. To avoid this, keep a duplicate key.

If you lose a key, make another duplicate key immediately.

To make a duplicate key and register it with your HISS system, take the spare key, the key tag, and the motorcycle to your dealer.

▶ Store the key tag in a safe location.

A metal key holder may cause damage to the area surrounding the ignition switch.



# Instruments, Controls, & Other Features

## Ignition Switch

Leaving the ignition switch in the ❙ (On) position with the engine stopped will drain the battery. Do not turn the key while riding.

## Engine Stop Switch

Do not use the engine stop switch except in an emergency. Doing so when riding will cause the engine to suddenly turn off, making riding unsafe.

If you stop the engine using the engine stop switch, turn the ignition switch to the ○ (Off) position. Failing to do so will drain the battery.

## Odometer

The display locks at 999,999 when the read-out exceeds 999,999.

## Tripmeter

The tripmeters return to 0.0 when each read-out exceeds 9,999.9.

## HISS

The Honda Ignition Security System (HISS) immobilizes the engine's ignition system if an improperly-coded key is used to try and start the engine. When the ignition switch is turned to the ○ (Off) position, the HISS immobilizer system is always alert, even if the HISS indicator is not flashing.

If the ignition switch is turned to the ❙ (On) position with the engine stop switch in the ⟳ (Run) position, the HISS indicator turns on and goes off after a few seconds to indicate it is OK to start the engine. **HISS Indicator Does Not Turn off** P. 129

The HISS indicator starts flashing every 2 seconds for 24 hours after the ignition switch is turned to the ○ (Off) position. You can turn this feature on or off. P. 40

**EU Directive**

This immobilizer system complies with the RE (Radio Equipment) Directive (2014/53/EU).

CE

The declaration of conformity to RE Directive is provided to the owner at the time of purchase. The declaration of conformity should be kept at a safe place. When the declaration of conformity is lost or is not provided, contact your dealer.

South Africa only


Singapore only


Morocco only




*Continued*

## Document Bag

The owner's manual, registration, and insurance information can be stored in the plastic document bag located underside of the rear seat. ➡P. 100

## Ignition Cut-off System

A banking (lean angle) sensor automatically stops the engine and fuel pump if the motorcycle falls over. To reset the sensor, you must turn the ignition switch to the ○ (Off) position and back to the ❙ (On) position before the engine can be restarted.

## Assist-slipper Clutch System

The assist-slipper clutch system helps to prevent the rear tyre from locking up when the deceleration of your motorcycle produces a strong engine braking effect. It also makes the clutch lever operation feel lighter.

Use only MA classification engine oil for your motorcycle. Using engine oil other than MA classification oil could result in damage to the assist-slipper clutch system.

## Throttle by Wire System

This model is equipped with a Throttle by Wire System.
Do not put magnetized items or items susceptible to magnetic interference near the right handlebar switches.

### Automatic Brightness Control

The backlight brightness of the mater will be controlled automatically when "Auto" is selected on the backlight brightness setting.
Ambient brightness is detected by the photosensor.
Do not damage or cover the photosensor. Otherwise, the automatic brightness control may not work properly.

Photosensor

# Caring for Your Motorcycle

Frequent cleaning and polishing is important to ensure the life of your Honda. A clean motorcycle makes it easier to spot potential problems.
In particular, seawater and salts used to prevent ice on roads promote the formation of corrosion. Always wash your motorcycle thoroughly after riding on coastal or treated roads.

### Washing

Allow the engine, muffler, brakes, and other high-temperature parts to cool before washing.

1. Rinse your motorcycle thoroughly using a low pressure garden hose to remove loose dirt.
2. If necessary, use a sponge or a soft towel with mild cleaner to remove road grime.
   ► Clean the headlight lens, panels, and other plastic components with extra care to avoid scratching them.



*Continued* 

Avoid directing water into the air cleaner, muffler, and electrical parts.

3. Thoroughly rinse your motorcycle with plenty of clean water and dry with a soft, clean cloth.
4. After the motorcycle dries, lubricate any moving parts.
   ▶ Make sure that no lubricant spills onto the brakes or tyres. Brake discs, pads, drum or shoes contaminated with oil will suffer greatly reduced braking effectiveness and can lead to a crash.
5. Lubricate the drive chain immediately after washing and drying the motorcycle.
6. Apply a coat of wax to prevent corrosion.
   ▶ Avoid products that contain harsh detergents or chemical solvents. These can damage the metal, paint, and plastic on your motorcycle.
   Keep the wax clear of the tyres and brakes.
   ▶ If your motorcycle has any mat painted parts, do not apply a coat of wax to the mat painted surface.



## Washing Precautions

Follow these guidelines when washing:

- Do not use high-pressure washers:
  ▶ High-pressure water cleaners can damage moving parts and electrical parts, rendering them inoperable.
  ▶ Water in the air intake can be drawn into the throttle body and/or enter the air cleaner.
- Do not direct water at the muffler:
  ▶ Water in the muffler can prevent starting and causes rust in the muffler.
- Dry the brakes:
  ▶ Water adversely affects braking effectiveness. After washing, apply the brakes intermittently at low speed to help dry them.
- Do not direct water under the seat:
  ▶ Water in the under seat compartment can damage your documents and other belongings.

- Do not direct water at the air cleaner:
  - ▶ Water in the air cleaner can prevent the engine from starting.
- Do not direct water near the headlight:
  - ▶ The headlight's inside lens may fog temporarily after washing or while riding in the rain. This does not impact the headlight function.
    However, if you see a large amount of water or ice accumulated inside the lens(es), have your vehicle inspected by your dealer.
- Do not use wax or polishing compounds on mat painted surface:
  - ▶ Use a soft cloth or sponge, plenty of water, and a mild detergent to clean mat painted surfaces. Dry with a soft clean cloth.



*Continued* 

## Aluminium Components

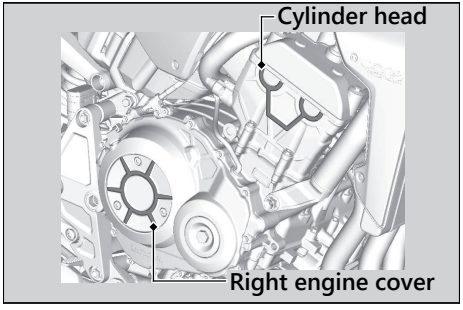
Aluminium will corrode from contact with dirt, mud, or road salt. Clean aluminium parts regularly and follow these guidelines to avoid scratches:

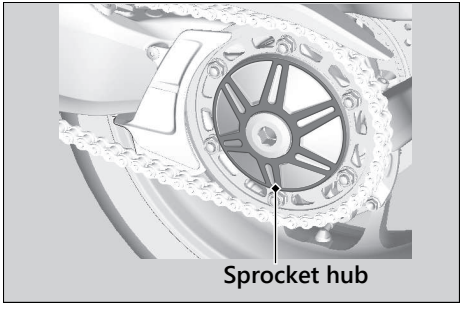
- Do not use stiff brushes, steel wool, or cleaners containing abrasives.
- Avoid riding over or scraping against curbs.

### Cylinder Head/Sprocket Hub/Right Engine Cover

The cylinder head, sprocket hub and right engine cover contain part of non-surface treated.
To avoid corroision and discoloration, apply a coat of wax not including abrasives.
If the non-surface treated parts have corroded, polish them using a wax including abrasives.

- ▶ Do not clean the painted parts using the wax including abrasives.
- ▶ Do not use stiff brushes, steel wool, or sand paper.
- ▶ Do not use strongly acidic or strongly alkaline detergent.



## Panels

Follow these guidelines to prevent scratches and blemishes:

- Wash gently using a soft sponge and plenty of water.
- To remove stubborn stains, use diluted detergent and rinse thoroughly with plenty of water.
- Avoid getting petrol, brake fluid, or detergents on the instruments, panels, or headlight.

## Exhaust Pipe and Muffler

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.

When the exhaust pipe and muffler are painted, do not use a commercially available abrasive kitchen cleaning compound. Use a neutral detergent to clean the painted surface on the exhaust pipe and muffler. If you are not sure if your exhaust pipe and muffler are painted, contact your dealer.

NOTICE

Even though the exhaust is made of stainless steel, it can become stained. Remove all marks and blemishes as soon as they are noticed.

# Storing Your Motorcycle

If you store your motorcycle outdoors, you should consider using a full-body motorcycle cover.

If you won't be riding for an extended period, follow these guidelines:

- Wash your motorcycle and wax all painted surfaces (except mat painted surfaces). Coat chrome pieces with rust-inhibiting oil.
- Lubricate the drive chain. P. 91
- Place your motorcycle on a maintenance stand and position a block so that both tyres are off the ground.
- After rain, remove the body cover and allow the motorcycle to dry.
- Remove the battery (P. 99) to prevent discharge. Fully charge the battery and then place it in a shaded, well-ventilated area.
  - ▶ If you leave the battery in place, disconnect the negative ⊖ terminal to prevent discharge.

After removing your motorcycle from storage, inspect all maintenance items required by the Maintenance Schedule.

# Transporting Your Motorcycle

If your motorcycle needs to be transported, it should be carried on a motorcycle trailer or a flatbed truck or trailer that has a loading ramp or lifting platform, and motorcycle tie-down straps. Never try to tow your motorcycle with a wheel or wheels on the ground.

NOTICE

Towing your motorcycle can cause serious damage to the transmission.

# You & the Environment

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

## 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.



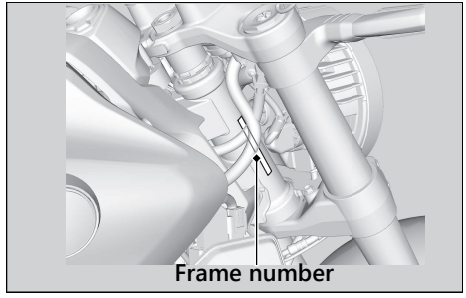
*Continued*

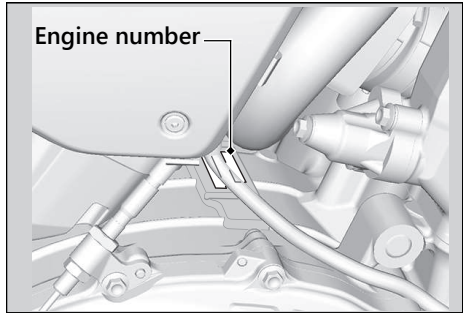
## Recycle Wastes

Put oil and other toxic wastes in approved containers and take them to a recycling centre. Call your local or state office of public works or environmental services to find a recycling centre in your area, and to get instructions on how to dispose of non-recyclable wastes. Do not place used engine oil in the trash, or pour it down a drain or on the ground. Used oil, petrol, coolant, and cleaning solvents contain poisons that can hurt refuse workers and contaminate drinking water, lakes, rivers, and oceans.

# Serial Numbers

The frame and engine serial numbers uniquely identify your motorcycle and are required in order to register your motorcycle. They may also be required when ordering replacement parts.
You should record these numbers and keep them in a safe place.



# Fuels Containing Alcohol

Some conventional fuels blended with alcohol are available in some locales to help reduce emissions to meet clean air standards. If you plan to use blended fuel, check that it is unleaded and meets the minimum octane rating requirement.

The following fuel blends can be used in your motorcycle:

- Ethanol (ethyl alcohol) up to 10% by volume.
  - ▶ Petrol containing ethanol may be marketed under the name Gasohol.

The use of petrol containing more than 10% ethanol may:

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

NOTICE

Use of blended fuels containing higher than approved percentages can damage metal, rubber, plastic parts of your fuel system.

If you notice any undesirable operating symptoms or performance problems, try a different brand of petrol.

# Catalytic Converter

This motorcycle is equipped with four three-way catalytic converters. Each catalytic converter contains precious metals that serve as catalysts in high temperature chemical reactions that convert hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) in the exhaust gasses into safe compounds.

A defective catalytic converter contributes to air pollution and can impair your engine's performance. A replacement unit must be an original Honda part or equivalent.

Follow these guidelines to protect your motorcycle's catalytic converters.

- Always use unleaded petrol. Leaded petrol will damage the catalytic converters.
- Keep the engine in good running condition.
- Have your motorcycle serviced if your engine is misfiring, backfiring, stalling, or otherwise not running properly, stop riding and turn off the engine.

# Specifications

## ■ Main Components

| | | |
|---|---|---|
| Overall length | | 2,120 mm (83.5 in) |
| Overall width | **except KO type** | 789 mm (31.1 in) |
| | **KO type** | 790 mm (31.1 in) |
| Overall height | | 1,090 mm (42.9 in) |
| Wheelbase | | 1,455 mm (57.3 in) |
| Minimum ground clearance | | 135 mm (5.3 in) |
| Caster angle | | 25° 0′ |
| Trail | | 100 mm (3.9 in) |
| Curb weight | **ED, Ⅲ ED, U, GS type** | 212 kg (467 lb) |
| | **Ⅱ ED, Ⅳ ED type** | 213 kg (470 lb) |
| | **KO type** | 210 kg (463 lb) |
| Maximum weight capacity *1 | **except KO type** | 188 kg (414 lb) |
| | **KO type** | 168 kg (370 lb) |
| Maximum luggage weight *2 | 27 kg (60 lb) | |
| Passenger capacity | Rider and 1 passenger | |
| Minimum turning radius | 3.0 m (9.8 ft) | |
| Displacement | 998 $cm^3$ (60.9 cu-in) | |
| Bore x stroke | 75.0 x 56.5 mm (2.95 x 2.22 in) | |
| Compression ratio | 11.6:1 | |
| Fuel | Unleaded petrol<br>91 RON or higher | |
| Fuel containing alcohol | ETHANOL up to 10 % by volume | |
| Tank capacity | 16.2 L (4.28 US gal, 3.56 Imp gal) | |
| Battery | YTZ10S<br>12 V-8.6 Ah (10 HR) / 12 V-9.1 Ah (20 HR) | |
| Gear ratio | 1st | 2.538 |
| | 2nd | 1.941 |
| | 3rd | 1.578 |
| | 4th | 1.363 |
| | 5th | 1.217 |
| | 6th | 1.115 |
| Reduction ratio (primary / final) | 1.604 / 2.933 | |

*1 : Including rider, passenger, all luggages, and accessories
*2 : Includes the weight of the luggage and added accessories.

## ■ Service Data

| | | |
|---|---|---|
| Tyre size | Front | 120/70ZR17M/C (58W) |
| | Rear | 190/55ZR17M/C (75W) |
| Tyre type | | Radial, tubeless |
| Recommended Tyre | Front | BRIDGESTONE BATTLAX HYPERSPORT S21F M |
| | | DUNLOP SPORTMAX D214F G |
| | Rear | BRIDGESTONE BATTLAX HYPERSPORT S21R M |
| | | DUNLOP SPORTMAX D214 G |
| Tyre category of use *1 | Normal | Permitted |
| | Special | Not Permitted |
| | Snow | Not Permitted |
| | Moped | Not Permitted |
| Tyre air pressure | Front | 250 kPa (2.50 kgf/cm², 36 psi) |
| | Rear | 290 kPa (2.90 kgf/cm², 42 psi) |
| Minimum tread depth | Front | 1.5 mm (0.06 in) |
| | Rear | 2.0 mm (0.08 in) |
| Spark plug | (standard) | IMR9E-9HES (NGK) or VUH27ES (DENSO) |
| Spark plug gap | | 0.8 - 0.9 mm (0.03 - 0.04 in) |
| Idle speed | | 1,200 ± 100 rpm |

*1 : EU regulation

| | | |
|---|---|---|
| Recommended engine oil | Honda 4-stroke motorcycle oil API Service Classification SG or higher, excluding oils marked as "Energy Conserving" or "Resource Conserving," SAE 10W-30, JASO T 903 standard MA | |
| Engine oil capacity | After draining | 2.7 L (2.9 US qt, 2.4 Imp qt) |
| | After draining & engine oil filter change | 3.0 L (3.2 US qt, 2.6 Imp qt) |
| | After disassembly | 3.6 L (3.8 US qt, 3.2 Imp qt) |
| Recommended brake fluid | Honda DOT 4 Brake Fluid | |
| Cooling system capacity | 2.75 L (2.91 US qt, 2.42 Imp qt) | |
| Recommended coolant | Pro Honda HP Coolant | |
| Recommended drive chain lubricant | Drive chain lubricant designed specifically for O-ring chains<br>If not available, use SAE 80 or 90 gear oil. | |
| Drive chain slack | 40 - 50 mm (1.6 - 2.0 in) | |
| Standard drive chain | RK525ROZ7 | |
| | No. of links 116 | |

| | | |
|---|---|---|
| Standard sprocket size | Drive sprocket | 15T |
| | Driven sprocket | 44T |

## ■ Bulb

| | |
|---|---|
| Headlight | LED |
| Brakelight/Taillight | LED |
| Position light | LED |
| Front turn signal light/Position light | LED |
| Rear turn signal light | LED |
| License plate light | LED |

## ■ Fuse

| | |
|---|---|
| Main fuse | 30 A |
| Other fuse | 30 A, 15 A, 10 A, 7.5 A |

## ■ Torque Specifications

| | |
|---|---|
| Engine oil drain bolt | 30 N·m (3.1 kgf·m, 22 lbf·ft) |
| Oil filter | 26 N·m (2.7 kgf·m, 19 lbf·ft) |
| Bearing holder pinch bolt | 27 N·m (2.8 kgf·m, 20 lbf·ft) |
| Front wheel axle bolt | 79 N·m (8.1 kgf·m, 58 lbf·ft) |
| Front wheel brake caliper mounting bolt | 45 N·m (4.6 kgf·m, 33 lbf·ft) |
| Front wheel axle pinch bolt | 22 N·m (2.2 kgf·m, 16 lbf·ft) |
| Muffler mount bolt and nut | 22 N·m (2.2 kgf·m, 16 lbf·ft) |
| Right step bracket bolt A | 37 N·m (3.8 kgf·m, 27 lbf·ft) |
| Right step bracket bolt B | 37 N·m (3.8 kgf·m, 27 lbf·ft) |
| Muffler band bolt | 22 N·m (2.2 kgf·m, 16 lbf·ft) |
| Rear wheel axle nut | 108 N·m (11.0 kgf·m, 80 lbf·ft) |

# Index