2021

Owner's Manual

CB1000RA





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

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

Some services/features are not available in the USA and Canada.

Welcome

Congratulations on your purchase of a new Honda vehicle. 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 vehicle.

To protect your investment, we urge you to take responsibility for keeping your vehicle well serviced and maintained. Also, observe the break-in guidelines, and always perform the pre-ride inspection and other periodic checks in this manual.

When service is required, remember that your Honda dealer knows your vehicle best. If you have the required mechanical "knowhow" and tools, you can purchase an official Honda Service Manual to help you perform many maintenance and repair tasks. ▶ P. 170

Read the warranty information thoroughly so that you understand the warranty coverage and that you are aware of your rights and responsibilities. **2** P. 171

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

Canada www.honda.ca.

Happy riding!

A Few Words About Safety

Your safety, and the safety of others, is very important. Operating this vehicle 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 vehicle. You must use your own good judgment.

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

- Safety labels on the vehicle
- Safety Messages preceded by a safety alert symbol and one of three signal words: DANGER, WARNING, or CAUTION. These signal words mean:

ADANGER

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

AWARNING

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

ACAUTION

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 vehicle, other property, or the environment.

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Operation Guide	P. 16
	_
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Vehicle Safety

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

Safety Guidelines	 P. 3
Safety Labels	
Safety Precautions	
Riding Precautions	P. 10
Accessories & Modifications	P. 14
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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 helmet and protective apparel. ▶ P. 9

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 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 vehicle is stopped.

Take Time to Learn & Practice

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

Safety Guidelines

We recommend that all riders take a certified course approved by the Motorcycle Safety Foundation (MSF) or a state approved training course. New riders should start with the basic course, and even experienced riders will find the advanced course beneficial.

For information about the MSF training course nearest you, call the national toll-free number: (800) 446-9227.

USA Other riding tips can be found in the You and Your Motorcycle Riding Tips booklet that came with your vehicle.

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.

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 judgment and ride safely.

Don't Drink or Use Drugs and Ride

Alcohol or drugs 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. The same is true for drug use. Don't drink or use and ride, and don't let your friends do it either

Keep Your Honda in Safe Condition

It's important to keep your vehicle properly maintained and in safe riding condition. Inspect your vehicle before every ride and perform all recommended maintenance. Never exceed load limits (>> P. 15), and do not modify your vehicle or install accessories that would make your vehicle unsafe (>> P. 14).

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 OFF position, and evaluate the condition of your vehicle. 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 vehicle may have suffered damage that is not immediately apparent. Have your vehicle thoroughly checked at a qualified service facility as soon as possible.

Carbon Monoxide Hazard

Exhaust contains poisonous carbon monoxide, a colorless, 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 vehicle inside a garage or other enclosure.

AWARNING

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

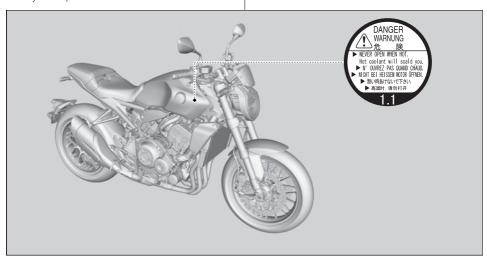
Breathing this colorless, odorless gas can quickly cause unconsciousness and lead to death.

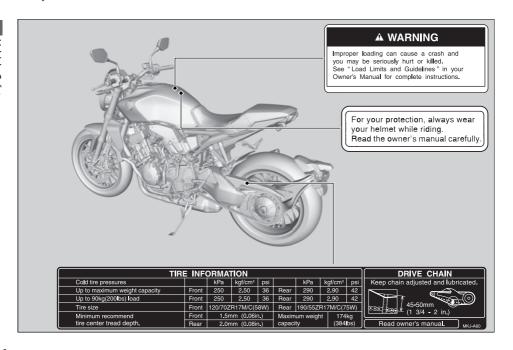
Only run your vehicle's engine when it is located in a well ventilated area outdoors.

Safety Labels

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

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





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 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 helmet, eye protection, and high-visibility protective clothing. Avoid wearing loose clothes that could get caught on any part of the vehicle. Ride defensively in response to weather and road conditions.

Helmet

Should be safety-standard certified, highvisibility, and 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

IISA Look for a DOT (Department of Transportation)

IISA Look for a DOT (Department of Transportation)

USA Look for a DOT (Department of Transportation) certification label on any helmet you buy.

AWARNING

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 Pants

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

Riding Precautions

Break-in Period

During the first 300 miles (500 km) of running, follow these guidelines to ensure your vehicle'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 vehicle's stability.
 - ➤ Where possible, reduce speed before turning; otherwise you risk sliding out.

- Exercise caution on low traction surfaces.
 - ▶ The tires 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.

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 6 mph (10 km/h).
- The brake lever and pedal may recoil slightly when applying the brakes. This is normal.
- Always use the recommended front/rear tires and sprockets to ensure correct ABS operation.

■ Engine Braking

Engine braking helps slow your vehicle 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 vehicle 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 vehicle 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 vehicle 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 vehicle to fall.
- 5. Turn the ignition switch to the LOCK position and remove the key. ➡ P. 72

Refueling and Fuel Guidelines

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

- Use only unleaded gasoline.
- Use recommended octane number. Using lower octane gasoline will result in decreased engine performance.
- Do not use fuels containing a high concentration of alcohol.

 P. 169
- Do not use stale or contaminated gasoline or an oil/gasoline mixture.
- Avoid getting dirt or water in the fuel tank.

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 will limit torque during a wheelie while 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 vehicle 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 tires 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 or approved for your vehicle by Honda or make modifications to your vehicle from its original design. Doing so can make it unsafe. Modifying your vehicle may also void your warranty and make your vehicle illegal to operate on public roads. Before deciding to install accessories on your vehicle, be certain the modification is safe and legal.

AWARNING

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 vehicle. Your vehicle was not designed for these attachments, and their use can seriously impair your vehicle's handling.

Loading

- Carrying extra weight affects your vehicle'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. 178

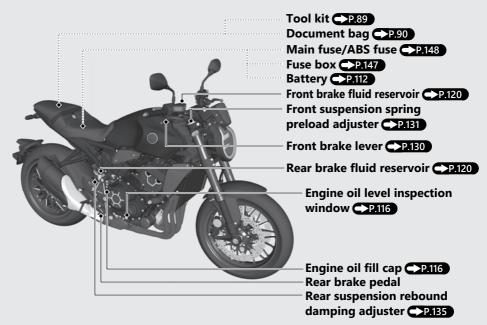
- Tie all luggage securely, evenly balanced and close to the center of the vehicle.
- Do not place objects near the lights or the muffler.

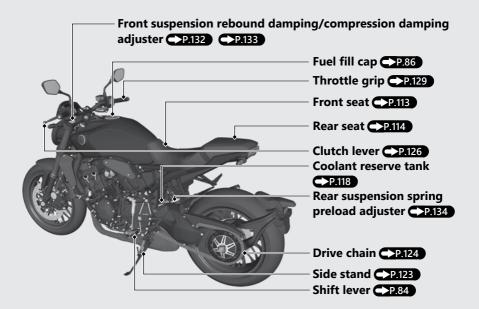
AWARNING

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

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

Parts Location





Instruments

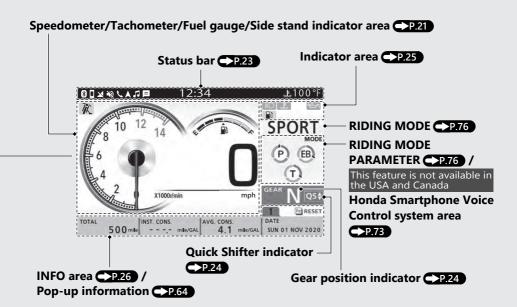
You can change the speed and mileage, and fuel mileage meter units. P.40 P.55







Do not operate the display functions for a long time with the engine stopped. It may result in a low (or dead) battery.



Instruments (Continued)

Basic Operations

You can operate and set the various functions of the display using the switches on the left handlebar.



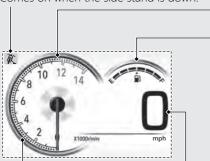
When switching or setting the display, refer to the switch operation guide displayed. Switch operation guide:

Speedometer/Tachometer/Fuel gauge/Side stand indicator area

Display type: TYPE 1

Side stand indicator

Comes on when the side stand is down.



Tachometer

Speedometer

NOTICE

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

Tachometer red zone

(excessive engine rpm range)

Fuel gauge

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



At the same time, the reserve fuel indicator comes on.

► If the fuel gauge indicator flashes in a repeat pattern or turns off: →P.142

NOTICE

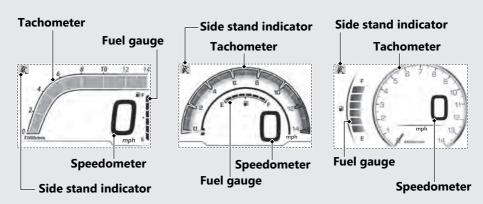
You should refuel when the reading approaches the E (1st) segment. Running out of fuel can cause the engine to misfire, damaging the catalytic converter.

Instruments (Continued)

Speedometer/Tachometer/Fuel gauge/Side stand indicator area has four display types. The display and arrangement of the speedometer, tachometer and fuel gauge change depending on each display type.

To change the display type: P.40 P.49

Display type: TYPE 2 Display type: TYPE 3 Display type: TYPE 4



Status bar



Coolant temperature gauge

Displays the coolant temperature. Display range:94°F to 269°F (35°C to 132°C)

- 93°F (34 °C) or less: "---" is displayed.
- Between 251°F to 268°F (122°C and 131°C):
 - High coolant temperature indicator lights.
 - Coolant temperature digits flash.
- Above 269°F (132 °C):
 - High coolant temperature indicator lights.
 - "269°F (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)

Gear position indicator

The gear position is shown in the gear position indicator.

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

Quick Shifter indicator

Displays the current status of the Quick Shifter.

This indicator is displayed in the gear position indicator.

No display: Quick Shifter system is disabled.

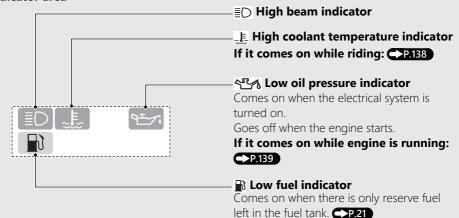
QS • : Quick Shifter upshifting is enabled.

QS ▼ : Quick Shifter downshifting is enabled.

(S \$): Quick Shifter upshifting and downshifting are both enabled.

QUICK SHIFTER: →P.41 →P.46 →P.85

Indicator area

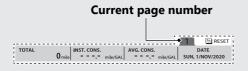


Instruments (Continued)

INFO area

The INFO area displays various vehicle information.

The INFO area has four pages and displays four pieces of information on each page.

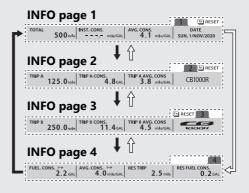


The information item displayed in the INFO area can be changed arbitrarily.

To change the information: →P.40 →P.52

To switch page of the INFO area

To change page of the INFO area, push the sel switch in the direction of \blacksquare or \blacksquare .



- Push the sel switch in the direction of
- Push the sel switch in the direction of

The types of information item that can be displayed in the INFO area are as follows:

TOTAL →P.28

TRIP A →P.28

TRIP A CONS. P.29

TRIP A AVG. CONS. P.29

TRIP B →P.30

TRIP B CONS. →P.30

TRIP B AVG. CONS. -P.31

INST. CONS. P.31

AVG. CONS. →P.32

AVG. SPEED P.32

ELAPSED →P.33

REV P.33

GRIP ANGLE P.33

VOLTAGE →P.34

DATE P.34

User letter P.34

Logo P.34

SHIFT POINT P.35

FUEL CONS. \longrightarrow P.35

AVG. CONS. \longrightarrow P.36

AVG. SPEED \longrightarrow P.32

ELAPSED → P.37

RES TRIP → P.37

RES FUEL CONS. P.38

Blank →P.38

Continued 27

Instruments (Continued) Odometer [TOTAL]

Total distance ridden.

TOTAL

 $500\,\mathrm{mile}$

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

Tripmeter A [TRIP A]

Distance ridden since the tripmeter A was reset.

TRIP A

 $125.0\,\mathrm{mile}$

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

To reset the tripmeter A: P.39

Tripmeter A fuel consumption [TRIP A CONS.]

Displays the tripmeter A fuel consumption since the tripmeter A was reset.
Display range: 0.0 to 299.9 GAL (L)

TRIP A CONS.
4.8GAL

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

Tripmeter A fuel consumption is reset when you reset tripmeter A.

To reset the tripmeter A: P.39

Tripmeter A average fuel mileage [TRIP A AVG. CONS.]

Displays the average fuel mileage since the tripmeter A was reset.

The average fuel mileage will be calculated based on the value on tripmeter A. Display range: 0.0 to 299.9 mile/GAL (mile/L, km/L or L/100 km)

• When the average fuel mileage is reset: "-----" is displayed.

TRIP A AVG. CONS 3.8 mile/GAL

When "---." is displayed except for the abovementioned cases, go to your dealer for service. Tripmeter A average fuel mileage is reset when you reset tripmeter A.

To reset the tripmeter A: P.39

Instruments (Continued)

Tripmeter B [TRIP B]

Distance ridden since the tripmeter B was reset.

TRIP B **250.0** mile

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

To reset the tripmeter B: P.39

Tripmeter B fuel consumption [TRIP B CONS.]

Displays the tripmeter B fuel consumption since the tripmeter B was reset.

Display range: 0.0 to 299.9 GAL (L)

TRIP B CONS.
11.4GAL

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

Tripmeter B fuel consumption is reset when you reset tripmeter B.

To reset the tripmeter B: P.39

Tripmeter B average fuel mileage [TRIP B AVG. CONS.]

Displays the average fuel mileage since the tripmeter B was reset.

The average fuel mileage will be calculated based on the value on tripmeter B.

Display range: 0.0 to 299.9 mile/GAL (mile/L, km/L or L/100 km)

 When the average fuel mileage is reset: "-----" is displayed.

TRIP B AVG. CONS 4.5 mile/GAL

When "---.-" is displayed except for the abovementioned cases, go to your dealer for service. Tripmeter B average fuel mileage is reset when you reset tripmeter B.

To reset the tripmeter B: →P.39

Current fuel mileage [INST. CONS.]

Displays the current instant fuel mileage. Display range: 0.0 to 299.9 mile/GAL (mile/L, km/L or L/100 km)

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

INST. CONS. 8.0 mile/GAL

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

Instruments (Continued)

Average fuel mileage [AVG. CONS.]

Displays the average fuel mileage since the average fuel mileage was reset.

Display range: 0.0 to 299.9 mile/GAL (mile/L, km/L or L/100 km)

• When the average fuel mileage is reset: "---.-" is displayed.

AVG. CONS. 4.1 mile/GAL

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

To reset the average fuel mileage

Average speed [AVG. SPEED]

Displays the average speed since the average speed was reset.

Display range: 0 to 186 mph (0 to 299 km/h)

- Initial display: "---" is displayed.
- When your vehicle has traveled less than 0.1 mile since the engine was started: "---" is displayed.
- When your vehicle operating time is less than 16 seconds since the engine was started: "---" is displayed.

AVG. SPEED **57** mph

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

To reset the average speed →P.39

| Elapsed time [ELAPSED]

Displays the engine operating time since the elapsed time was reset.

Display range: 00:00 to 99:59 (hours:minutes)

• Above 99:59: back to 00:00

02:30

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

To reset the elapsed time P.39

Numerical tachometer display [REV]

Displays the engine revolutions per minutes.

REV 5200 r/min

Throttle grip angle [GRIP ANGLE]

Displays the throttle grip angle during operation.

GRIP ANGLE 30 deg

When "--" is displayed, or "90" is displayed and the PGM-FI (Programmed Fuel Injection) malfunction indicator lamp (MIL) comes on, go to your dealer for service.

Battery voltage [VOLTAGE]

Displays the current voltage.

VOLTAGE F 1

13.6 v

Date [DATE]

Displays today's date

DATE

SUN, 1/NOV/2020

To set the date: P.40 P.54





User letter

The user may choose what characters are displayed.

CB1000R

To set the USER LETTER: →P.40 →P.53

Logo Control

Displays the CB1000R logo.



SHIFT POINT set value [SHIFT POINT]

Displays the SHIFT POINT set value. Display range: 5,000 - 11,400 r/min

> SHIFT POINT 6500 r/min

To set the SHIFT POINT: P.40 P.47





Fuel consumption in this time [FUEL] $CONS. \longrightarrow$

Displays the fuel consumption since the electrical system was turned on.

Display range: 0.0 to 50.0 GAL (L)

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

When the electrical system is turned off, the fuel consumption is reset.

> FUEL, CONS. \mapsto 2.2 GAL

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

Average fuel mileage in this time [AVG. CONS. |→]

Displays the average fuel mileage since the electrical system was turned on.

Display range: 0.0 to 299.9 mile/GAL (mile/L, km/L, or L/100 km)

• Initial display: "----" is displayed. When the electrical system is turned off, the average fuel mileage is reset.

AVG. CONS. → 4.3 mile/GAL

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

■ Average speed in this time [AVG. SPEED |→]

Displays the average speed since the electrical system was turned on.

Display range: 0 to 186 mph (0 to 299 km/h)

- Initial display: "---" is displayed.
- When your vehicle has traveled less than 0.1 mile since the engine was started: "---" is displayed.
- When your vehicle operating time is less than 16 seconds since the engine was started: "---" is displayed.

When the electrical system is turned off, the average speed is reset.

AVG. SPEED → **95** mph

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

| Elapsed time in this time [ELAPSED |

Displays the engine operating time since the electrical system was turned on.

Display range: 00:00 to 99:59 (hours:minutes)

- Above 99:59: back to 00:00.
- Initial display: "--:--" is displayed.

When the electrical system is turned off, the elapsed time is reset.

ELAPSED→ 01:30

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

Reserve tripmeter [RES TRIP]

Distance ridden since the reserve fuel indicator light turned on.

Display range: 0.0 to 9999.9 mile (km)

- Above 9999.9: back to 0.0.
- When the reserve fuel indicator is off: "-----" is displayed.

RES TRIP

3.5 mile

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

Reserve fuel consumption [RES FUEL CONS.]

Displays the fuel consumption since the reserve fuel indicator light turned on. Display range: 0.0 to 299.9 GAL (L)

• When the reserve fuel indicator is off: "---.-" is displayed.

RES FUEL CONS.

0.2 GAL

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

Blank display

Display is blank.

To Reset the Information

Select the page in the INFO area that contains the item you want to reset with or of the sel switch. P.20

Press and hold the fn function switch until the background color of the information item changes.

- ▶ If there is no resettable information item on the page, there is no response to the switch operation.
- If there are multiple resettable information items on the same page, use ◀ or ▶ of the sel switch to select the item.

Press and hold on the sel switch until the information item is reset.

To exit the reset mode, press and hold the Fin function switch.

Also, the tripmeter A, tripmeter A fuel consumption and tripmeter A average fuel mileage are automatically reset when only the reserve fuel remains in the fuel tank (the reserve fuel indicator is on) and the reserve fuel indicator goes off after refueling. You can activate or deactivate the automatic reset mode. P.40

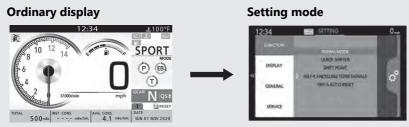
Setting mode

To shift to the setting mode

Push and hold the sel switch in the direction of

To select the desired setting menu, operate the **a** sel switch on the left handlebar.

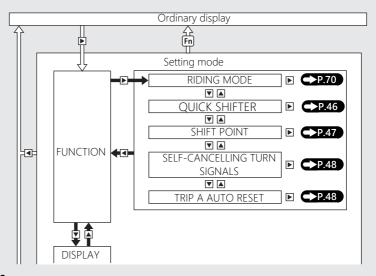
▶ When switching to the setting mode, the clock, indicators and speed are displayed at the top of the screen.



To return to the ordinary display

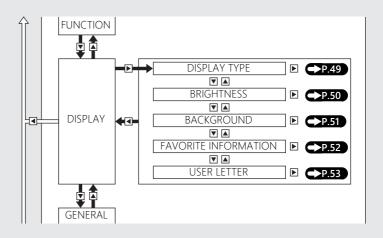
- Press and hold the fin function switch.
- Push and hold the sel switch in the direction of
 return to the upper hierarchy.
- Wait about 30 seconds without pressing the button.
- Turn the electrical system is off and on again.

Setting flow



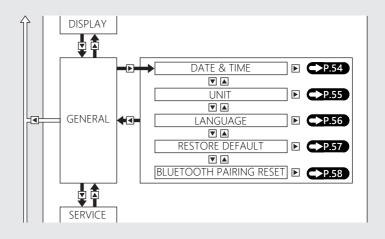
Push/Press

⇒ Push and hold/Press and hold



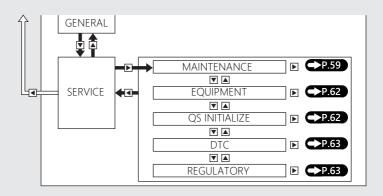
Push/Press

Push and hold/Press and hold



→ Push/Press

Push and hold/Press and hold



→ Push/Press

Push and hold/Press and hold

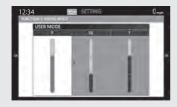
RIDING MODE -P.76

You can change the setting value of the USER MODE.

- 1 Select the parameter ("P", "EB" or "T") using or ▶ of the sel switch.
- Select the desired setting value using or or of the sel switch.
- 3 Return to the ordinary display to complete the setting. P.40

To continue setting, push and hold the sel switch in the direction of to return to the upper hierarchy.

▶ The set value is retained.



To return to the default settings:

- Push and hold the sel switch in the direction of .
- 2 Reset the setting according to the switch operation guide. P.20



QUICK SHIFTER

You can change the settings of the Quick Shifter.

UP: Change the setting for upshifting.

DOWN: Change the setting for downshifting.

BOTTITE CHange the setting for downshirting.		
OFF	Deactivate	
SOFT		
MEDIUM	Activate	
HARD		

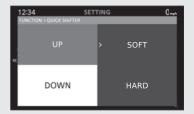
SOFT, MEDIUM or HARD indicate the load level of the shift pedal.

To use the Quick Shifter: P.85

- Select the "UP" or "DOWN" using the sel up or sel down switch.
- 2 Select to the desired setting according to the switch operation guide. P.20
- 3 Return to the ordinary display to complete the setting. P.40

To continue setting, push and hold the sel switch in the direction of \blacksquare to return to the upper hierarchy.

▶ The set value is retained.



SHIFT POINT

ON/OFF : You can activate or deactivate

the shift up mode.

SHIFT POINT: You can change the engine

revolutions at which the tachometer starts blinking in

the shift up mode.

Shift up mode: P.65

- 2 Select to the desired setting according to the switch operation guide. P.20
- 3 Return to the ordinary display to complete the setting. →P.40
 To continue setting, push and hold the sel switch in the direction of to return to the upper hierarchy.
 - ► The set value is retained.



SELF-CANCELLING TURN SIGNALS

You can enable or disable turn signal automatic cancellation. P.70

- Select the "ON" or "OFF" using or of the sel switch.
- 2 Return to the ordinary display to complete the setting. P.40

To continue setting, push the sel switch in the direction of \blacksquare to return to the upper hierarchy.

► The set value is retained.



TRIP A AUTO RESET

You can enable or disable the tripmeter A automatic reset mode. P.39

- Select the "ON" or "OFF" using or of the sel switch.
- 2 Return to the ordinary display to complete the setting. P.40

To continue setting, push the sel switch in the direction of \blacksquare to return to the upper hierarchy.

▶ The set value is retained.



DISPLAY TYPE

You can change the display type of the speedometer / tachometer / fuel gauge.

○P.21

- 1 Select the display type ("TYPE 1", "TYPE 2"
 "TYPE 3" or "TYPE 4") using ▲ or ▼ of the sel switch.
- 2 Return to the ordinary display to complete the setting. ►P.40
 To continue setting, push and hold the sel switch in the direction of to return to
 - ► The set value is retained.

the upper hierarchy.



BRIGHTNESS

You can adjust the backlight brightness to one of the eight levels or select the auto adjustment.

Automatic brightness control: P.155

The display can become dark when the display is very hot. If it does not restore to its original brightness, contact your dealer.

- Select the backlight brightness using ▲ or

 ▼ of the sel switch.
- 2 Return to the ordinary display to complete the setting. P.40

To continue setting, push the sel switch in the direction of \blacksquare to return to the upper hierarchy.

▶ The set value is retained.



BACKGROUND

You can change the setting of the background to one of the three colors or select the auto adjustment.

Automatic Background Control:

→P.155

- **1** Select the background color using **▲** or **▼** of the sel switch.
- 2 Return to the ordinary display to complete the setting. P.40

To continue setting, push the sel switch in the direction of \blacksquare to return to the upper hierarchy.

► The set value is retained.



FAVORITE INFORMATION

You can change the information items displayed in the INFO area. P.26

- Select the page of the INFO area ("INFO1", "INFO2", "INFO3" or "INFO4") using or or of the sel switch.
- 2 Select the desired setting according to the switch operation guide. >P.20
 - If you select the item that is already selected in another area, the previously selected item will automatically turn "BI ANK"
- 3 Return to the ordinary display to complete the setting. P.40

To continue setting, push and hold the sel switch in the direction of \blacksquare to return to the upper hierarchy.

► The set value is retained.



USER LETTER

You can edit the USER LETTER with up to 10 characters.

- 1 Edit the USER LETTER.
 - ► To select the character using the ▲ ▼ sel switch.
 - To set the character using the [Fn] function switch.
- 2 Select the "OK", and then press the Fin function switch.



DATE & TIME

- 2 Select the desired setting according to the switch operation guide. P.20
 - ➤ When "24 / 12" is set to 24-hour indication, "am / pm" cannot be used.
- 3 Return to the ordinary display to complete the setting. P.40

To continue setting, push and hold the sel switch in the direction of \blacksquare to return to the upper hierarchy.

► The set value is retained.



UNIT

You can change the speed, mileage, and fuel mileage meter units.

- 1 Select the "SPEED" or "TEMP" or "FUEL CONS." using ▲ or ▼ of the sel switch.
- 2 Select the desired setting according to the switch operation guide. P.20
- 3 Return to the ordinary display to complete the setting. P.40

To continue setting, push and hold the sel switch in the direction of to return to the upper hierarchy.

▶ The set value is retained.



If you want to select "L/100km" or "km/L" for fuel consumption, "km/h" must be selected in the "SPEED" menu in advance.

When "mph" for speed is selected, "mile/gal" or "mile/L" can be selected.

LANGUAGE

Changes the system language.

- Select the language using ▲ or ▼ of the sel switch.
- 2 Return to the ordinary display to complete the setting. P.40

To continue setting, push the sel switch in the direction of \blacksquare to return to the upper hierarchy.

► The set value is retained.



RESTORE DEFAULT

The set values can be returned to the default settings.

Reset the settings according to the switch operation guide. P.20



The following items are restored to their default values:

- DISPLAY TYPE
- SHIFT POINT
- BRIGHTNESS
- BACKGROUND
- USER LETTER
- FAVORITE INFORMATION
 - ► The page of the currently selected INFO area is also initialized.
- · DATE & TIME
 - ► 12/24 settings are not initialized.
- UNIT
- RIDING MODE
 - ► The riding mode currently selected is also initialized.
- SELF-CANCELLING TURN SIGNALS
- LANGUAGE
- TRIP A AUTO RESET

BLUETOOTH PAIRING RESET

This feature is not available in the USA and Canada

You can reset the Bluetooth® pairing record.

To connect the device P.73

Reset the settings according to the switch operation guide. P.20



▶ If the pairing information remains in your smartphone even if the pairing information is deleted from the vehicle, the smartphone may be connected to the vehicle again.

MAINTENANCE

You can check the next periodic inspection time and next engine oil change.

You can change the setting of the next periodic inspection and next engine oil change.

Next periodic inspection



Next engine oil change

Display range:

DISTANCE:

Next periodic inspection:

----, 4,000 to -99,999 mile (----, 6,400 to -99,999 km)

Next engine oil change:

----, 8,000 to -99,999 mile (----, 12,800 to -99,999 km)

- Pass 0 mile (0 km): "-" mark is displayed.
- ► Changing the SPEED unit from "mile" to "km" will also display ranges over 12,800 km, depending on the distance.

DATE:

Month: ---, JAN to DEC Year: ----, 2020 to 2119

When reaching any of the following, the pop-up information appears in the ordinary display.

P.64

- "300 mile" ("500 km") from the next periodic inspection.
- "60 mile" ("100 km") from the next engine oil change.
- One month before the set month.



Maintenance pop-up information

Next inspection setting

① Select "→" (periodic inspection) or "♥" (engine oil change) using ▲ or ▼ of the sel switch.



- 2 Select the desired setting according to the switch operation guide.
 - ▶ If you press and hold ▲ of the sel switch while setting the "DISTANCE", it will move every 1000.
 - Available setting range of the DISTANCE:
 Periodic inspection
 ----, 100 to 4,000 mile (100 to 6,400 km)
 Engine oil change
 ----, 100 to 8,000 mile (100 to 12,800 km)
- 3 Return to the ordinary display to complete the setting. ►P.40

 To continue setting, push and hold the sel switch in the direction of to return to the upper hierarchy.

EQUIPMENT

"EQUIPMENT" is displayed but not selectable.



QS INITIALIZE

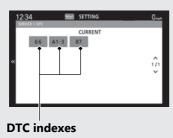
"QS INITIALIZE" is displayed but not selectable.



DTC

Displays a current problem with the vehicle. If your vehicle has problem, DTC index is displayed.

Reduce speed and have your vehicle inspected by your dealer as soon as possible.



REGULATORY

Displays the radio wave authentication screen.



Pop-up information

In the following cases, pop-up information is displayed in the INFO area.

• Maintenance information:

When the inspection time of your vehicle is approaching.

When your vehicle has multiple pieces of information to display, the pop-up information display will alternate between them.

Maintenance Information

Indication	Explanation	Remedy
DISTANCE DATE 900 mile JAN., 4	The periodic inspection time of your vehicle is approaching.	Have your vehicle inspected by your dealer.
DISTANCE DATE 200 mile JAN., 2	The oil change time of your vehicle is approaching.	Change the engine oil.

You can hide the pop-up information by pushing either the \blacksquare \blacksquare sel switch or \blacksquare function switch while the pop-up information is displayed.

Tachometer color function

Shift Up Mode

When shift up mode is ON, the tachometer color changes according to the shift point setting.

To set the shift up mode P.40

○P.47

The tachometer blinks yellow when the engine revolutions exceed the set value of SHIFT POINT.

Indicators

If one of these indicators does not come on when it should, have your dealer check for problems. Refer to the "Instruments" about indicators appearing on the display: P.25



PGM-FI (Programmed Fuel Injection) malfunction indicator lamp (MIL) Comes on briefly when the electrical system is turned on.

If it comes on while engine is running: P.139



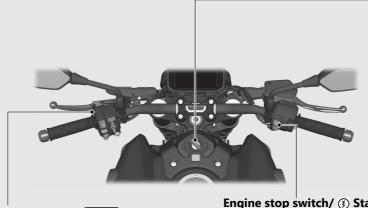
- কৈ Torque Control indicator

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

If it comes on while riding: P.141

• Comes on when the Torque Control is turned off.

Switches



Left handlebar switch →P.70

Engine stop switch/ (3) Start button

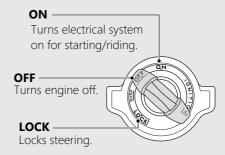
Should normally remain in the (Run) position.

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

ტ Ignition Switch

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

➤ Key can be removed when in the OFF or LOCK position.



Switches (Continued) Left handlebar switches

Headlight dimmer/Passing light control switch

- **■** : High beam
- **≣D** : Low beam
- **■ PASS** : Flashes the high beam headlight.

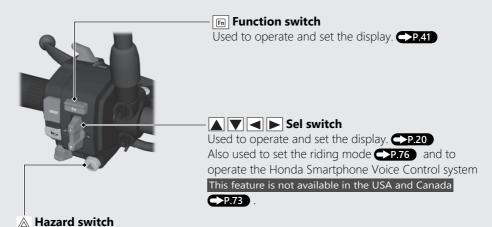
MODE switch

Used to change the riding mode. P.20

Horn button

The turn signal will automatically stop when you complete the turn. (You can manually cancel the lights by pressing the switch in.) When used for a lane change, the turn signal will automatically stop in about 7 seconds or after riding 164 yards (150 m). In some cases, the timing at which the turn signal stops could be less or more. Always use the recommended tires to ensure correct automatic cancellation operation.

To enable or disable the turn signal automatic cancellation: →P.48



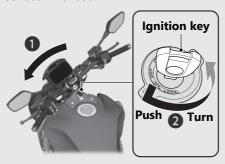
Switchable when the electrical system is on. Can be turned off regardless of whether the electrical system is on or off.

► The signals will continue to flash if you turn the electrical system off while the hazard switch is on.

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.

Honda Smartphone Voice Control system

This feature is not available in the USA and Canada

Connecting your smartphone with the vehicle and a *Bluetooth*® headset via *Bluetooth*® allows you to operate the smartphone by voice input from the headset. You can also use the system by operating switches on the handlebar

➤ To use the system, you need to install the dedicated application on your smartphone beforehand and pair your smartphone with the vehicle and the headset.

For terms of service and information on how to install/operate the dedicated application, see the following URL:

https://global.honda/voice-control-system/



Communication range:

Within a 1 meter radius of the vehicle

Supported *Bluetooth®* version/profiles

Bluetooth® version	Bluetooth 4.2 or higher
Bluetooth®	GATT (Generic Attribute Profile)
	HOGP (HID over GATT Profile)

Bluetooth® Wireless Technology
The Bluetooth® word mark and logos are
registered trademarks owned by Bluetooth
SIG, Inc., and any use of such marks by
Honda Motors Co., Ltd., is under license.
Other trademarks and trade names are those
of their respective owners.

Honda Smartphone Voice Control system (Continued)

- Costs of network communication and communication equipment necessary for the use of this feature shall be borne by the user himself/herself.
- You cannot pair two or more smartphones at once.
- Some smartphones may not be compatible with the feature.
- We shall not be liable for any damages or trouble in the use of smartphone.
- When unable to connect your smartphone to the vehicle, change the storage location of the smartphone.

The system itself has certain limitations. Therefore, you must verify the voice guidance and information in the meter provided by the system by carefully observing the roadway, signs, and signals, etc. If you are unsure, proceed with caution. Always use your own good judgment, and obey traffic laws while riding.

AWARNING

Using the Honda Smartphone Voice Control system while riding can take your attention away from the road, causing a crash in which you could be seriously injured or killed.

- Be especially cautions when crossing intersections, in heavy traffic. etc.
- Observe the roadway, signs, and signals, carefully.
- · Obey traffic laws while riding.

Honda Smartphone Voice Control system Limitations

This feature is not available in the USA and Canada

Changes in operating systems, hardware, software, and other technology integral to providing Honda Smartphone Voice Control system functionality, as well as new or revised governmental regulations, may result in a decrease or cessation of Honda Smartphone Voice Control system functionality and services.

Honda cannot and does not provide any warranty or guarantee of future Honda Smartphone Voice Control system performance or functionality.

Pairing your smartphone via *Bluetooth®*

1 Select the BLUETOOTH PAIRING RESET menu.



- 2) Reset the pairing information according to the switch operation guide. P.20
- (3) After resetting, complete pairing while the Bluetooth® indicator is flashing by operating the application on your smartphone.
 - ► When the display returns to the ordinary display, the *Bluetooth*® indicator will flash.

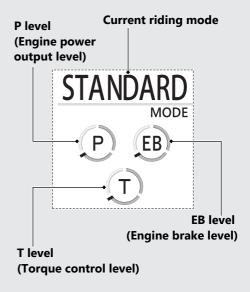


- For operation of the application, follow the instruction of the application.
- Make a *Bluetooth*® paring after stopping at a safe place.

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 modes: [STANDARD], [RAIN],
[USER] and [SPORT]

[STANDARD]: Standard, all-around mode for a variety of situations.

[RAIN]: Good for stable riding on slippery surfaces such as rainy conditions.

[SPORT]: This mode is suitable for sports riding. You can feel the higher engine response compared to STANDARD.

You cannot change the initial setting levels for [STANDARD], [RAIN], and [SPORT].

[USER]

Each initial setting level can be changed.

Initial setting

	P level	EB level	T level
STANDARD	2	2	2
RAIN	1	2	3
SPORT	3	1	1
USER	1* ¹	1*1	1*1, 2

Note

^{*1:} Level can be changed.

^{*2 :} If 0 is selected, the level will change to 1 the next time the electrical system is turned on.

Riding mode (Continued)

P level (Engine power output level)

P level has three setting levels.

Available setting range: 1 to 3

- Level 1 has the least power.
- Level 3 has the most power.

T level (Torque control level)

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

Available setting range: 0 to 3

- Level 1 is the minimum Torque Control level.
- Level 3 is the maximum Torque Control level.
- Level 0 deactivates the Torque Control.
- ▶ If the electrical system is turned from off to on while the T level is set to 0, the T level is automatically set to 1.

EB level (Engine brake level)

EB level has three setting levels.

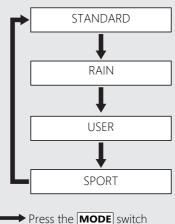
Available setting range: 1 to 3

- ► Level 1 has the weakest engine braking effect.
- Level 3 has the strongest engine braking effect.

Selecting the riding mode

- 1 Stop the vehicle.
- 2 Press the **MODE** switch with the throttle fully closed.





→ Press the **MODE** switch

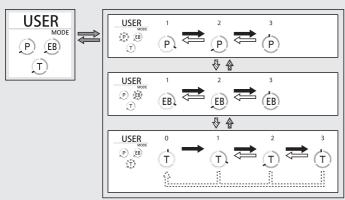
Riding mode (Continued) Setting the riding mode

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

- 1 Stop the vehicle.
- 2 Select the USER riding mode. →P.79
- 3 Press and hold the **MODE** switch until the P display is flashed.
- 4 Select the desired parameter and setting level.
 - ➤ To select the parameter, push the sel switch in the direction of <a> or <a>
 - ▶ To select the setting level, press ▲ or▼ on the sel switch.
 - ► T level can be changed to 0 (off) by pressing and holding ▲ on the sel switch while selecting the T parameter.

5 Press and hold the **MODE** switch until the parameter stops flashing.

You can also change the levels on the USER riding mode in the setting mode of the instruments. P.40 P.45



- Press and hold the **MODE** switch
- Push the sel switch in the direction of
- Push the sel switch in the direction of
- \longrightarrow Press \bigcirc on the sel switch
- → Press on the sel switch
- Press and hold on the sel 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 discoloration.
- The engine will not start if the throttle is fully open.

- 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 vehicle with the transmission in gear so long as the side stand is raised.
- 4 Press the start button with the throttle completely closed.
 - ▶ If you cannot start the engine, open the throttle slightly (about 1/8 in (3 mm), without freeplay) and press the start button.

About 1/8 in (3 mm), without freeplay



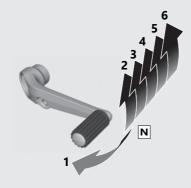
If the engine does not start:

- 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.137

Shifting Gears

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



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

Recommended Shift Points

Shifting Up	
From 1st to 2nd	12 mph (20 km/h)
From 2nd to 3rd	19 mph (30 km/h)
From 3rd to 4th	25 mph (40 km/h)
From 4th to 5th	31 mph (50 km/h)

37 mph (60 km/h)

Shifting Down	
From 6th to 5th	28 mph (45 km/h)
From 5th to 4th	22 mph (35 km/h)
From 4th to 3rd	16 mph (25 km/h)

NOTICE

From 5th to 6th

Improper shifting can damage the engine, transmission, and drive train. Also, coasting or towing the vehicle for long distances with the engine off can damage the transmission.

Ouick Shifter

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 1,500 rpm 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.

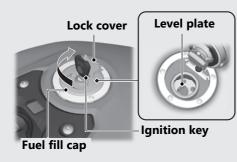
 The Quick Shifter can be individually turned ON (active) and OFF (deactivate).
 The shift pedal load level for activating the Quick Shifter can be adjusted during up and downshifting.



 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.

To Change the Setting of Quick Shifter →P.40 →P.46

Refueling



Do not fill with fuel above the level plate. **Fuel type:** Unleaded gasoline only **Recommended fuel octane number:** Pump Octane Number (PON) 86 or higher. **Tank capacity:** 4.28 US gal (16.2 L)

Refueling and Fuel Guidelines P.12

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 refueling, 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.

AWARNING

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

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

USB Socket

Your vehicle is equipped with a USB socket (for USB Type-C only).

The USB socket is located under the rear seat. P.114

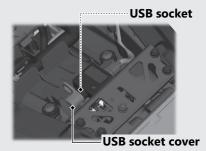
This socket is for battery charge only.
Use USB devices at your own risk. In no event shall Honda be liable for any damage to your USB device when in use.

Only USB devices within the following specifications can be connected. Rated capacity is

15 W (5 V, 3.0 A).

To connect your USB device

- Remove the rear seat. →P.114
- 2 Remove the USB socket cover.
- 3 Connect a certified USB cable to the socket.



USB Socket (Continued)

- ➤ To prevent the battery from becoming weak (or dead), keep the engine running while drawing current from the socket.
- ➤ To prevent entry of foreign matter into the socket, be sure to close the cover.
- ➤ Carefully secure all connected devices, as vibration may cause damage to them or they could shift unexpectedly.

NOTICE

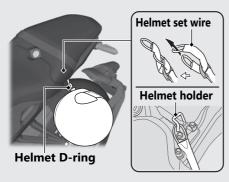
- Using any heat-generating USB devices or improperly rated USB devices can damage the socket.
- Do not use the USB socket in wet conditions.
 Do not use the USB socket while washing your vehicle. Wet conditions will damage the USB socket.
- Do not allow the USB cable to become pinched or trapped.
- Do not allow the USB cable to interfere with the steering or controls.

Storage Equipment

Helmet Holder

The helmet holder is located under the rear seat.

A helmet set wire is in the tool kit.



▶ Use the helmet holder only when parked.

Removing the Rear Seat P.114

AWARNING

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.



Storage Equipment (Continued)

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 vehicle.

Removing the rear seat P.114

Maintenance

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

An optional larger tool kit may be available.

Check with your Honda dealer's parts department.

Importance of Maintenance	 P. 92
Maintenance Schedule	P. 94
Maintenance Record	P. 97
Maintenance Fundamentals	P. 98
Removing & Installing Body	
Components	P. 112
Battery	P. 112
Front Seat	P. 113
Rear Seat	P. 114
Single Seat Cowl	P. 115
Engine Oil	P. 116
Coolant	P. 118
Brakes	P. 120
Side Stand	P. 123

Orive Chain	P. 124
Clutch	
Throttle	
Other Adjustments	P. 130
Adjusting the Brake Lever	
Adjusting the Front Suspension	
Adjusting the Rear Suspension	P. 134

Importance of Maintenance

Importance of Maintenance

Keeping your vehicle 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 vehicle before each ride, and perform the periodic checks specified in the Maintenance Schedule.

▶ P. 94

AWARNING

Improperly maintaining your vehicle 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.

For information about the exhaust emission and noise emission requirements of the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and the Environment and Climate Change Canada (ECCC). ▶ P. 164



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

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 vehicle 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. All scheduled maintenance is considered a normal owner operating cost and will be charged to you by your dealer. Keeping an accurate maintenance record will help ensure your vehicle is properly maintained.

₽ P. 97

Make sure whoever performs the scheduled maintenance completes the maintenance record. Retain all service documents. If you sell your vehicle, these service documents should be transferred with the vehicle to the new owner.

_							Frequ	iency *1				
	Items		× 1,000 mi	0.6	4	8	12	16	20	24	Regular	Refer to
			× 1,000 km	1.0	6.4	12.8	19.2	25.6	32.0	38.4	Replace	page
	Fuel Line	1										-
	Throttle Operation	1										129
	Air Cleaner *2						B			B		-
ms	Crankcase Breather *3 Spark Plug				С	С	C	С	С	C		-
<u>=</u>	Spark Plug		Every 16,000	mi (25,	500 km):	II, Eve	ry 32,00	0 mi (51	,200 km): (3		-
Related	Valve Clearance	1										-
Sela	Engine Oil			B		B		B		B	1 Year	116
-L	Engine Oil Filter			0				B				-
issi	Engine Oil Filter Engine Idle Speed Radiator Coolant *5	1										-
E	Radiator Coolant *5										3 Years	118
	Cooling System	1										-
	Secondary Air Supply System	1										-
	Evaporative Emission Control System *4	1										-

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 Service Manual (▶ P. 170).

★ : Technical. In the interest of safety, have your vehicle serviced by your dealer.

Maintenance Legend

- : Inspect (clean, adjust, lubricate, or replace, if necessary)
- R : Replace
 - : Lubricate
- C : Clean

ltems		Frequency *1									
		× 1,000 mi	0.6	4	8	12	16	20	24	Regular	Refer to
		× 1,000 km	1.0	6.4	12.8	19.2	25.6	32.0	38.4	Replace	page
Drive Chain			Ever	y 600 m	ni (1,000) km):	, L		•		124
Brake Fluid *5										2 Years	120
Brake Pads Wear											121
Brake Pads Wear Brake System Brake Light Switch Headlight Aim											98
Brake Light Switch											122
Headlight Aim											-
Clutch System											126
Clutch System Side Stand Suspension											123
Suspension	1										131
Nuts, Bolts, Fasteners	1										-
Wheels/Tires	*										108
Steering Head Bearings	*										-

Notes:

- *1: At higher odometer reading, 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 : 50 STATE (meets California)
- *5 : Replacement requires mechanical skill.

Maintenance

Maintenance Record

Distance	Odometer	Date	Performed By:	Notes
600 miles (1,000 km)				
4,000 miles (6,400 km)				
8,000 miles (12,800 km)				
12,000 miles (19,200 km)				
16,000 miles (25,600 km)				
20,000 miles (32,000 km)				
24,000 miles (38,400 km)				
28,000 miles (44,800 km)				
32,000 miles (51,200 km)				
36,000 miles (57,600 km)				
40,000 miles (64,000 km)				
44,000 miles (70,400 km)				
48,000 miles (76,800 km)				
52,000 miles (83,200 km)				
56,000 miles (89,600 km)				
60,000 miles (96,000 km)				
64,000 miles (102,400 km)				
68,000 miles (108,800 km)				

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 tire, can be a major inconvenience.

Check the following items before you get on your vehicle:

- Tire tread wear and air pressures are within limits. ■ P. 108
- Lights, horn, and turn signals operate normally.
- Check the condition of the drive chain.
 Adjust slack and lubricate as needed.
 P. 105

Check the following items if you are carrying a passenger or cargo:

- Combined weight is within load limits.
 ▶ P. 178
- Cargo is secured properly.

Check the following items after you get on your vehicle:

- Throttle action moves smoothly without binding. ■ P. 129
- Brake lever and pedal operate normally.
- Check the fuel level and refuel when needed.
 ■ P. 12, ■ P. 86
- Engine stop switch functions properly.▶ P. 68

Check the following items at regular intervals:

- Oil level is between the upper and lower level marks.

 → P. 116
- Brake fluid level is Front: between the UPPER and LWR level marks. ₱ P. 120
 - Rear: between the UPPER and LOWER level marks.
 ▶ P. 120
- Side stand functions properly.

 → P. 123

Periodic Checks

You should also perform other periodic maintenance checks at least once a month regardless of how often you ride, or more often if you ride frequently.

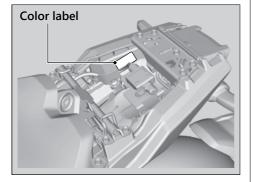
Also, check the odometer reading against the Maintenance Schedule and perform all maintenance that is due ▶ P. 94

Tires and wheels	Check the air pressure (▶ P. 108), examine tread for wear and damage (▶ P. 108), and check the wheels for damage.
Fluid levels	Check the engine oil level (▶ P. 116), engine coolant level (▶ P. 118), and brake fluid level (▶ P. 120).
Lights	Check that the headlight, brake light, taillight, turn signals and license plate light are working properly.
Controls	Check the freeplay of the clutch lever (▶ P. 126).
Drive chain	Check the slack (▶ P. 124), adjust the slack, and lubricate (▶ P. 106) as needed.
Fuses	Check that you have a full supply of spare fuses.
Nuts & bolts	Check the major nuts and bolts, and tighten as needed.

Replacing Parts

Always use Honda Genuine Parts or their equivalents to ensure reliability and safety. When ordering colored components, specify the model name, color, and code mentioned on the color label.

The color label is attached to the rear fender under the rear seat. **▶** P. 114



AWARNING

Installing non-Honda parts may make your vehicle 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 vehicle.

Battery

Your vehicle 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

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

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.

AWARNING

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.

WARNING: Battery posts, terminals, and related accessories contain lead and lead compounds.

Wash your hands after handling.

| Cleaning the Battery Terminals

- 1. Remove the battery.
 ▶ P. 112
- 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.

Charging

If you use electrical accessories that drain the battery or you do not ride frequently, we recommend that you charge the battery every 30 days using a charger designed specifically for your Honda, which can be purchased from your dealer. Read the information that came with your battery charger and follow the instructions on the battery. Avoid using an automobile-type battery charger, as these can overheat a motorcycle battery and cause permanent damage.

Make sure the ignition switch is in the OFF position before charging the battery.

NOTICE

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

NOTICE

Jump starting using an automobile battery can damage your vehicle's electrical system and is not recommended. Bump starting is also not recommended.

NOTICE

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

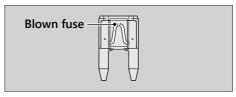
Fuses

Fuses protect the electrical circuits on your vehicle. If something electrical on your vehicle stops working, check for and replace any blown fuses. ▶ P. 147

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. 180



NOTICE

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

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

Engine Oil

Engine oil consumption varies and oil quality deteriorates according to riding conditions and time elapsed.

Maintenance Fundamentals

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.

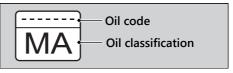
Selecting the Engine Oil

For recommended engine oil, see "Specifications."

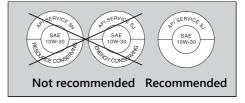
P. 179

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
- 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

AWARNING

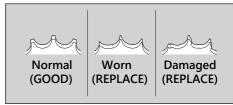
Clean filler cap before removing. Use only DOT 4 fluid from a sealed container.

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. **52** P. 124

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

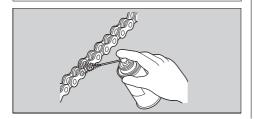
Use of a new chain with worn sprockets will cause rapid chain wear.

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:

Pro Honda HP Chain Lube or equivalent



Do not use a steam cleaner, a high pressure cleaner, a wire brush, volatile solvent such as gasoline 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 tires. Avoid applying excess chain lubricant to prevent spray onto your clothes and the vehicle.

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 aluminum engines or tap/mineral water can cause corrosion.

Crankcase Breathers

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

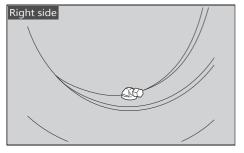
If the drain tube overflows, the air filter may become contaminated with engine oil causing poor engine performance.

Tires (Inspecting/Replacing)

| Checking the Air Pressure

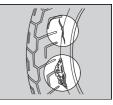
Visually inspect your tires and use an air pressure gauge to measure the air pressure at least once a month or any time you think the tires look low. Always check air pressure when your tires are cold.

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



Inspecting for Damage

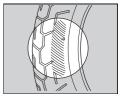
Inspect the tires for cuts, slits, or cracks that exposes fabric or cords, or nails or other foreign objects embedded in the side of the tire or the tread.



Also inspect for any unusual bumps or bulges in the side walls of the tires.

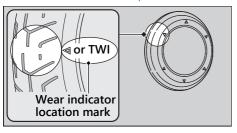
Inspecting for Abnormal Wear

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



Inspecting Tread Depth

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



AWARNING

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

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

Maintenance Fundamentals

Have your tires replaced by your dealer. For recommended tires, air pressure and minimum tread depth, see "Specifications."

→ P. 179

Follow these guidelines whenever you replace tires.

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

AWARNING

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

Tire Service Life

The service life of your tires is dependent on many factors, including, but not limited to, riding habits, road conditions, vehicle loading, tire air pressure, maintenance history, speed, and environmental conditions (even when the tires are not in use).

In addition to your regular inspections and maintenance, it is recommended that you have annual inspections performed once the tires reach 5 years old. It is also recommended that all tires be removed from service after 10 years from the date of manufacture, regardless of their condition or state of wear.

The last four digits of the TIN (tire identification number) indicate the date of manufacture.

Tire Identification Number (TIN)

The tire identification number (TIN) is a group of numbers and letters located on the sidewall of the tire.



DOT XXXX XXXX 22 09

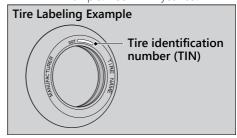
DOT: This indicates that the tire meets all

requirements of the U.S. Department of Transportation.

1) XXXX: Factory code

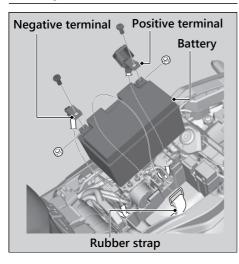
2 XXXX: Tire type code

(3) 22 09: Date of manufacture (week & year). Example: week 22 in year 09.



Removing & Installing Body Components

Battery



I Removal

Make sure the ignition switch is in the OFF position.

- 1. Remove the front seat. ▶ P. 113
- 2. Unhook the rubber strap from right side.
- **3.** Disconnect the negative

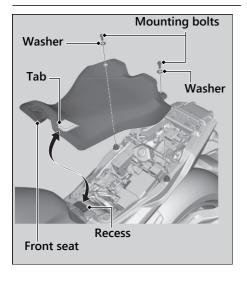
 → terminal from the battery.
- **4.** Disconnect the positive \oplus terminal from the battery.
- **5.** Remove the battery taking care not to drop the terminal nuts.

I Installation

Install the parts in the reverse order of removal. Always connect the positive \bigoplus terminal first. Make sure that bolts and nuts are tight.

Make sure the clock information is correct after the battery is reconnected. ▶ P. 54 For proper handling of the battery, see "Maintenance Fundamentals." ▶ P. 101 "Battery Goes Dead." ▶ P. 146

Front Seat



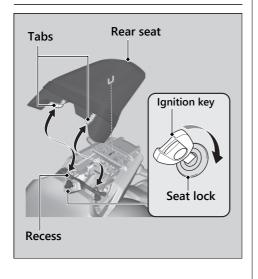
I Removal

- 1. Remove the rear seat.
 ▶ P. 114
- 2. Remove the mounting bolts and washers, and then pull the front seat back and up.

I 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



I Removal

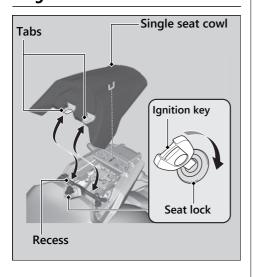
- **1.** Insert the ignition key into the seat lock.
- **2.** Turn the ignition key clockwise, then pull the rear seat up and back.

I 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



I 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.

I 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.

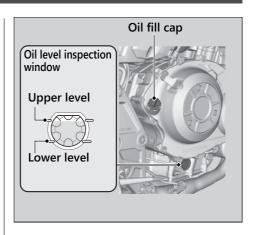
NOTICE

Never carry a passenger when the single seat cowl is installed. The single seat cowl was not designed to carry a passenger.

Engine Oil

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 vehicle 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. 103, ▶ P. 179

- Remove the oil fill cap. Add the recommended oil until it reaches the upper level mark.
 - ▶ Place your vehicle 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.

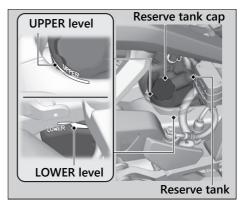
For the recommended oil and oil selection guidelines, see "Maintenance Fundamentals."

Checking the Coolant

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

- **1.** Place your vehicle on a firm, level surface.
- 2. Hold your vehicle in an upright position.
- 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 vehicle inspected by your dealer.



Adding Coolant

If the coolant level is below the LOWER level mark, add the recommended coolant

(▶ P. 107) 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.

AWARNING

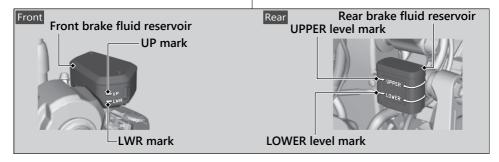
Removing the radiator cap while the engine is hot can cause the coolant to spray out, potentially scalding you.

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

Checking Brake Fluid

- **1.** Place your vehicle 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 vehicle inspected by your dealer.



Inspecting the Brake Pads

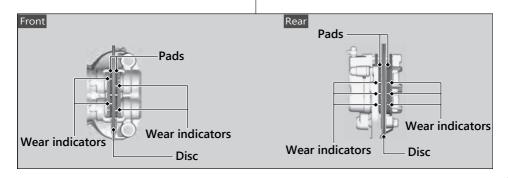
Check the condition of the brake pad wear indicators.

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 tire.

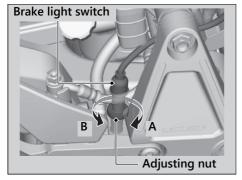
If necessary have the pads replaced by your dealer.

Always replace both left and right brake pads at the same time.

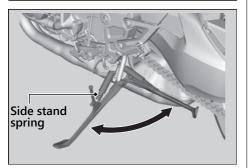


Adjusting the Brake Light Switch

Check the operation of the brake light switch. Hold the brake light 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



- 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 vehicle, 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 vehicle 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.

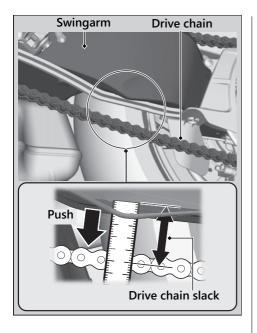
- **1.** Shift the transmission to Neutral. Stop the engine.
- **2.** Place your vehicle on its side stand on a firm, level surface.

- **3.** Check the slack in the lower half of the drive chain midway between the sprockets.
 - Push the lower part of the drive chain down and check the chain slack between the drive chain and swingarm at the lower end of the swingarm.

Drive chain slack: Swingarm to drive chain

13/4 - 2 in (45 - 50 mm)

▶ Do not ride your vehicle if the slack exceeds 2 1/8 in (55 mm).



Drive Chain ► Inspecting the Drive Chain Slack

- **4.** Roll the vehicle forward and check that the chain moves smoothly.
- **5.** Inspect the sprockets. **▶** P. 105
- **6.** Clean and lubricate the drive chain. **▶** P. 106

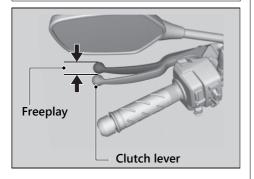
Checking the Clutch

I Checking the Clutch Lever Freeplay

Check the clutch lever freeplay.

Freeplay at the clutch lever:

3/8 - 13/16 in (10 - 20 mm)



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

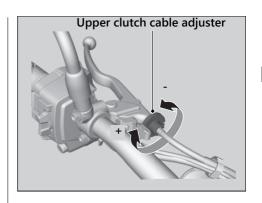
Improper freeplay adjustment can cause premature clutch wear.

Adjusting the Clutch Lever Freeplay

| Upper Adjustment

Attempt adjustment with the upper clutch cable adjuster first.

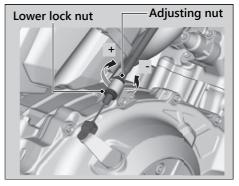
Turn the clutch cable adjuster until the freeplay is 3/8 - 13/16 in (10 - 20 mm).



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 3/8 13/16 in (10 20 mm).
- **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 vehicle does not creep. Gradually release the clutch lever and open the throttle. Your vehicle should move smoothly and accelerate gradually.

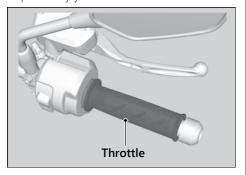


If proper adjustment cannot be obtained or the clutch does not work correctly, see your dealer.

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 vehicle inspected by your dealer.



Other Adjustments

Adjusting the Brake Lever

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

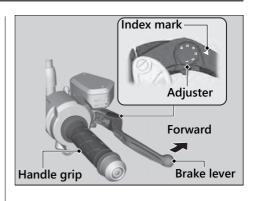
| Adjustment method

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.

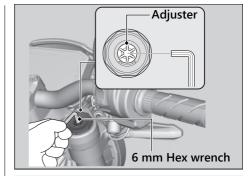


Adjusting the Front Suspension

| Spring Preload

You can adjust the spring preload by the adjuster to suit the load or the road surface. Turn the adjuster using a 6 mm Hex wrench. The spring preload adjuster has 20 turns from the full soft position.

Turn clockwise to increase spring preload (hard), or turn counterclockwise to decrease spring preload (soft). The standard position is 7 turns from the full soft position.



NOTICE

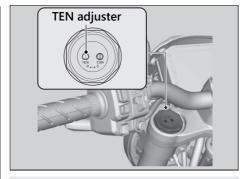
Do not turn the adjuster beyond its limits.

| Rebound Damping

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

The TEN adjuster has 5 1/2 turns from the full hard position.

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

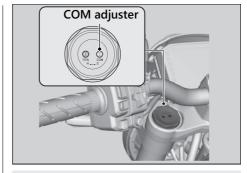
Do not turn the adjuster beyond its limits.

| Compression Damping

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

The COM adjuster has 7 turns from the full hard position.

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

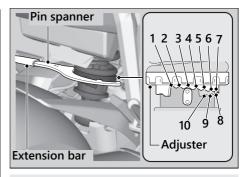
Do not turn the adjuster beyond its limits.

Adjusting the Rear Suspension

Adjusting the suspension requires a pin spanner. We recommend that you have your vehicle serviced by your dealer.

Spring Preload

You can adjust the spring preload by the adjuster to suit the load or the road surface. 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

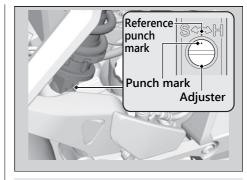
The rear shock absorber damper unit contains high pressure nitrogen gas. Do not attempt to disassemble, service, or improperly dispose of the damper. See your dealer.

Rebound Damping

You can adjust the rebound damping by the adjuster to suit the load or the road surface. The adjuster has 3 turns from the full hard position.

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

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Engine Will Not Start

Starter Motor Operates But Engine Does Not Start

Check the following items:

- Check the correct engine starting sequence.
 ■ P. 82
- Check that there is gasoline 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.

Starter Motor Does Not Operate

Check the following items:

- Check the correct engine starting sequence.

 P. 82
- Make sure engine stop switch is in the
 (Run) position.
 ₽ P. 68
- Check for a blown fuse. ▶ P. 147
- Check for a loose battery connection
 (►) P. 112) or battery terminal corrosion
 (►) P. 101).
- Check the condition of the battery.
 ▶ P. 146

If the problem continues, have your vehicle 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.

 Stop the engine using the ignition switch, and then turn the ignition switch to the ON position. 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 vehicle to your dealer.

If the fan is operating:

Allow the engine to cool with the ignition switch in the OFF position.

 After the engine has cooled, inspect the radiator hose and check if there is a leak.
 P. 118

If there is a leak:

Do not start the engine. Transport your vehicle to your dealer.

- **4.** Check the coolant level in the reserve tank. ▶ P. 118
 - Add coolant as necessary.
- **5.** If 1-4 check normal, you may continue riding, but closely monitor the high coolant temperature indicator.

Warning Indicators On or Flashing

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. 116,
 ▶ P. 117
- **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 vehicle may have a leak or another serious problem. Have your vehicle 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 vehicle 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 vehicle 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 6 mph (10 km/h).

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 the rear wheel 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 19 mph (30 km/h).

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 vehicle 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 3 mph (5 km/h).

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

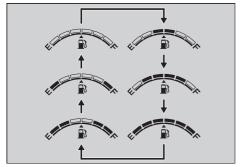
When the indicator comes on while the Torque Control is in operation, you will have to completely close the throttle to regain normal riding ability. The Torque Control indicator may come on if you rotate the rear wheel while your vehicle is lifted off the ground. In this case, turn the ignition switch to the OFF position, and then to the ON position again. The Torque Control indicator will go off after your speed reaches 3 mph (5 km/h).

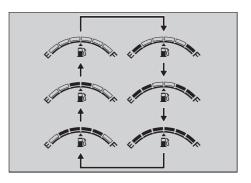
Other Warning Indications

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.





Tire 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 tire inspected/replaced by your dealer.

Emergency Repair Using a Tire Repair Kit

If your tire has a minor puncture, you can make an emergency repair using a tubeless tire repair kit.

Follow the instructions provided with the emergency tire repair kit.

Riding your vehicle with a temporary tire repair is very risky. Do not exceed 30 mph (50 km/h). Have the tire replaced by your dealer as soon as possible.

AWARNING

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

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

Smartphone Pairing Trouble

This feature is not available in the USA and Canada

Symptom	Cause/remedy
	Some smartphones you use may be incompatible with the vehicle and/or the operable functions may be limited.
	Check that the vehicle and smartphone are both in pairing mode. ▶ P. 75
Unable to pair a	Check your surroundings to make sure no other device being paired is present before re-pairing. Presence of a <i>Bluetooth®</i> device in the vicinity sometimes affects the pairing due to radio wave interference, etc.
smartphone	When connecting a smartphone, make sure no other <i>Bluetooth</i> ® device readied for pairing is present. Presence of a <i>Bluetooth</i> ® device in the vicinity sometimes affects the pairing due to radio wave interference, etc.
	Check that the vehicle pairing information is deleted from your smartphone <i>Bluetooth®</i> setting. Depending on the smartphone used, connecting may not be possible unless the pairing information is deleted.

Symptom	Cause/remedy	
	Depending on the smartphone you use, it may take some time for the vehicle to connect to a smartphone and to start using a dedicated application.	
Harliff to account	The connection may be temporarily disconnected when starting the engine, which is normal and not a malfunction. The smartphone will be reconnected after the engine is started.	
Unable to connect a smartphone	Check that <i>Bluetooth</i> ® status icon comes on. Refer to the instruction manual of your smartphone and check that your smartphone is in connectable state.	
	Some smartphones you use may not connect automatically. For connecting, follow the instructions in the instruction manual of your smartphone.	
	You cannot connect two or more smartphones at once.	

If the problem continues after the above-described inspection, have your vehicle inspected by your dealer.

Electrical Trouble

Battery Goes Dead

Charge the battery using a motorcycle battery charger.

Remove the battery from the vehicle 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 vehicle's electrical system and is not recommended.

Bump starting is also not recommended.

Burned-out Light Bulb

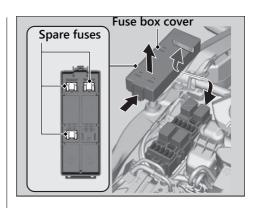
All light bulbs on the vehicle are LEDs. If there is an LED which is not turned on, see your dealer for servicing.

Blown Fuse

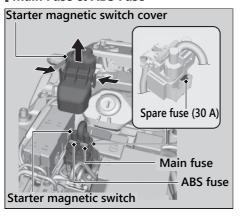
Before handling fuses, see "Inspecting and Replacing Fuses."
▶ P. 103

I Fuse Box Fuses

- 1. Remove the front seat.
 ▶ P. 113
- 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.



I Main Fuse & ABS Fuse



- 1. Remove the front seat. ▶ P. 113
- 2. Disconnect the negative

 the battery.

 P. 112
- **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.
- **5.** Reinstall parts in the reverse order of removal.

NOTICE

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

Information

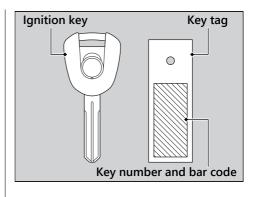
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Keys

Ignition Key

This vehicle has two ignition keys and a key tag with a key number and a bar code. Store the spare key and the key tag in a safe location. To make a duplicate key, take the spare key and the key tag to your dealer or a locksmith. If you lose all ignition keys and the key tag, the ignition switch assembly will probably have to be removed by your dealer to determine the key number.

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 readout exceeds 9,999.9.

Document Bag

The owner's manual, registration, and insurance information can be stored in the plastic document bag located on the underside of the rear seat. ▶ P. 90

Ignition Cut-off System

A banking (lean angle) sensor automatically stops the engine and fuel pump if the vehicle 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.

Honda Smartphone Voice Control system

FCC

FCC ID: NT8-H2WCLUSTER

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) The device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Class B device notice

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable

protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF exposure safety

This device complies with the FCC RF exposure limits and has been evaluated in compliance with mobile exposure conditions.

The equipment must be installed and operated with minimum distance of 20 cm of the human

ISED CANADA

bodv.

IC: 3043A-H2WCLUSTER

This device complies with Industry Canada License-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) The device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et.
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF exposure safety

This device complies with ISED RF exposure limits and has been evaluated in compliance with mobile exposure conditions.

The equipment must be installed and operated with minimum distance of 20 cm of the human body.

Instruments, Controls, & Other Features

CAN ICES-003

This Class B digital apparatus complies with Canadian ICES-003.

Les changements ou modifications non expressément approuvés par la partie responsable de la conformité peuvent annuler le droit de l'utilisateur à utiliser l'équipement.

Sécurité d'exposition aux RF

Cet appareil est conforme aux limites d'exposition RF d'ISDE et a été évalué conformément aux conditions d'exposition mobile.

L'équipement doit être installé et utilisé à une distance minimale de 20 cm du corps humain.

CAN NMB-003

Cet appareil numérique de classe B est conforme à la norme canadienne NMB-003.

Assist-slipper Clutch System

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

Use only MA classification engine oil for your vehicle. 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.

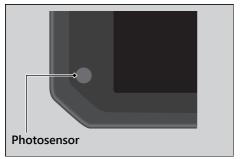
Do not put magnetized items or items susceptible to magnetic interference near the right handlebar switches.

Automatic Brightness Control

The backlight brightness of the meter 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.



Caring for Your Vehicle

Frequent cleaning and polishing is important to ensure the life of your Honda. A clean vehicle 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 vehicle 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 vehicle 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.
 Avoid directing water into the air cleaner, muffler, and electrical parts.

Caring for Your Vehicle

- **3.** Thoroughly rinse your vehicle with plenty of clean water and dry with a soft, clean cloth.
- **4.** After the vehicle dries, lubricate any moving parts.
 - Make sure that no lubricant spills onto the brakes or tires. 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 vehicle.
- **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 vehicle.
 - Keep the wax clear of the tires and brakes.
 - If your vehicle has any matte painted parts, do not apply a coat of wax to the matte 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 matte painted surface:
 - Use a soft cloth or sponge, plenty of water, and a mild detergent to clean matte painted surfaces. Dry with a soft clean cloth.

Aluminum Components

Aluminum will corrode from contact with dirt, mud, or road salt. Clean aluminum 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.

Caring for Your Vehicle

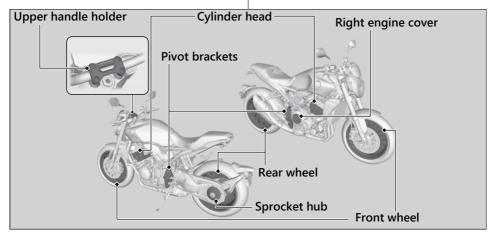
Part of Non-Coloring

The items of below illustration contain part of non-coloring.

To avoid corrosion and discoloration, apply a coat of wax not including abrasives.

If the non-coloring 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 gasoline, 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 Vehicle

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

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

- Wash your vehicle and wax all painted surfaces (except matte painted surfaces).
 Coat chrome pieces with rust-inhibiting oil.
- Lubricate the drive chain. ▶ P. 105
- Place your vehicle on a maintenance stand and position a block so that both tires are off the ground.
- After rain, remove the body cover and allow the vehicle to dry.
- Remove the battery (P. 112) to prevent discharge. Fully charge the battery and then place it in a shaded, well-ventilated area.

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

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

Canada For more information about storage, visit our website at www.honda.ca and look up "Storage Tips" under the "Honda Warranty" in the Warranty tab for your Model.

Transporting Your Vehicle

If your vehicle 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 vehicle with a wheel or wheels on the ground.

NOTICE

Towing your vehicle with a wheel or wheels on the ground can cause serious damage to the transmission.

You & the Environment

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

Choose Sensible Cleaners

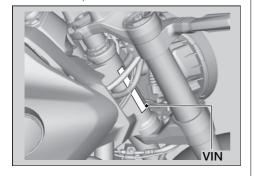
Use a biodegradable detergent when you wash your vehicle. Avoid aerosol spray cleaners that contain chlorofluorocarbons (CFCs) which damage the atmosphere's protective ozone layer.

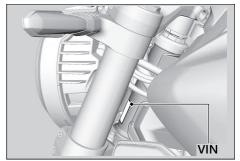
Recycle Wastes

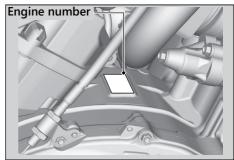
Put oil and other toxic wastes in approved containers and take them to a recycling center. Call your local or state office of public works or environmental services to find a recycling center in your area, and to get instructions on how to dispose of non-recyclable wastes. Do not place used engine oil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

Vehicle Identification Number

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







Emission Control Systems

Your vehicle engine emits combustion byproducts, including carbon monoxide (CO), oxides of nitrogen (NOx), and hydrocarbons (HC). Gasoline evaporation also emits hydrocarbons. Controlling the production of NOx, CO, and HC is important for the environment.

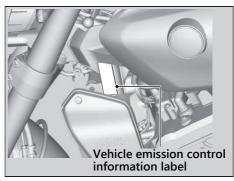
Exhaust Emission Requirements

The U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Environment and Climate Change Canada (ECCC) require that your vehicle comply with applicable exhaust, crankcase, and fuel permeation emission standards during its useful life, when operated and maintained according to the instructions provided.

CARB also requires that your vehicle comply with applicable evaporative emission requirements during its useful life, when

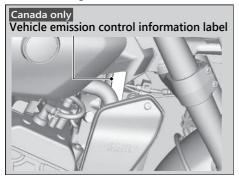
operated and maintained according to the instructions provided.

Distributor's Warranties for Honda Motorcycle Emission Control Systems is necessary in order to maintain a valid emissions system warranty. The Vehicle Emission Control Information label is attached to the left side of the frame.



Canada only

The Vehicle Emission Control Information label is attached to the right side of the frame.



Noise Emission Requirements

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

Exhaust Emission Control System

The exhaust emission control system includes the following components that should not need adjustment, although periodic inspection by your dealer is recommended.

▮ PGM-FI System

The PGM-FI (programmed fuel injection) system uses sequential multiport fuel injection, and is comprised of air intake, engine control, fuel control, and exhaust control subsystems. The engine control module (ECM) uses sensors to determine how much air enters the engine, and then controls how much fuel to inject.

Ignition Timing Control System

The ignition timing control system adjusts the ignition timing to reduce the amount of HC, CO, and NOx produced.

■ Secondary Air Injection System

The secondary air injection system adds filtered air into the exhaust gas to help improve emission control performance.

Emission Control Systems

■ Catalytic Converters

The exhaust system contains one or more catalytic converters. Catalytic converters use a catalyst to convert most of the harmful exhaust gas compounds into harmless compounds.

Evaporative Emission Control System

50 STATE (meets California)

An evaporative emissions control system uses a canister filled with charcoal to adsorb fuel vapor from the fuel tank while the engine is off. The vapor is drawn into the engine and burned while riding.

Crankcase Emissions Control System

The engine is equipped with a closed crankcase system to prevent discharging crankcase emissions into the atmosphere.

Blow-by gas is returned to the combustion chamber through the air cleaner housing and throttle body.

Fuel Permeation Emission Control

The fuel tank, fuel hoses, and fuel vapor charge hoses use fuel permeation control technologies to prevent fuel vapor emissions. Tampering with these components to reduce or defeat the effectiveness of the fuel permeation technologies is prohibited.

Noise Emission Control System

TAMPERING WITH THE NOISE CONTROL SYSTEM IS PROHIBITED:

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

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

 Removal of, or puncturing the muffler, baffles, header pipes or any other component which conducts exhaust gases.

- Removal of, or puncturing of any part of the intake system.
- Lack of proper maintenance.
- Removing or disabling any emissions compliance component, or replacing any compliance component with a noncompliant component.

Problems Affecting Vehicle Exhaust Emissions

Have your vehicle inspected and repaired by your dealer if you experience any of the following symptoms:

- Hard starting or stalling after starting
- Rough idling
- Misfiring or backfiring during acceleration
- Poor engine performance and poor fuel economy

Catalytic Converter

This vehicle is equipped with two 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 vehicle's catalytic converters.

- Always use unleaded gasoline. Leaded gasoline will damage the catalytic converters.
- Keep the engine in good running condition.
 A poorly running engine can cause the catalytic converter to overheat causing damage to the converter or the vehicle.
- If your engine is misfiring, backfiring, stalling, or otherwise not running properly, stop riding and turn off the engine. Have your vehicle serviced as soon as possible.

Oxygenated Fuels

Some conventional fuels blended with alcohol or an ether compound are available in some locales to help reduce emissions to meet clean air standards. These gasolines are collectively referred to as oxygenated fuels. If you plan to use oxygenated fuel, check that it is unleaded and meets the minimum octane rating and blend requirement.

The following fuel blends have been approved for use in your vehicle:

- Ethanol (ethyl alcohol) up to 10% by volume.
 - ► Gasoline containing ethanol may be marketed under the name Gasohol.
- Do not use gasoline containing methanol (methyl alcohol).

If you accidentally fill your fuel tank with an oxygenated fuel containing higher percentages, you may experience performance problems. To resolve the problem, have your dealer drain the fuel tank and replace with the correct fuel. Fuel system or performance problems resulting from the use of an oxygenated fuel containing higher percentages are not covered by your warranty.

NOTICE

Improper use of oxygenated fuels can damage metal, rubber, and plastic parts of your fuel system.

Oxygenated fuel can also damage paint. Damage caused by spilled fuel is not covered by warranty.

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

Authorized Manuals

USA The Service Manual used by your authorized dealer is available from your Honda dealer or Helm, Inc.

Canada See your dealer to order authorized manuals.

Also available, but not necessary to service your model, is the Honda Common Service Manual, which explains basic service information for various systems on Honda motorcycles, scooters, ATV, and SxS.

USA The Winter Storage Guide in conjunction with the Owner's Manual and Service Manual can help you prepare your Honda motorcycle, scooter, ATV, and SxS for winter storage.

These Honda manuals are written for the professional technician. However, if you possess the proper tools, observe the safety standards, and are mechanically capable, you should find them easy to use.

Special Honda tools are necessary for some procedures.

USA

Order online: www.helminc.com

Order Toll Free: 1-888-CYCLE93

(1-888-292-5393)

(NOTE: For Credit Card Orders Only) Monday - Friday 8:00 AM - 6:00 PM EST

Description

2021 CB1000RA Service Manual

Common Service Manual (61CSM00)

USA Winter Storage Guide (\$9507)

2021 CB1000RA Owner's Manual

Warranty Coverage and Service

Coverage

Your new Honda is covered by the following warranties:

- Vehicle Limited Warranty
- Emission Control System Warranty
- USA Noise Control Warranty

The responsibilities, restrictions, and exclusions that apply to these warranties are explained in the Warranties Booklet given to you by your Honda dealer at the time of purchase. Always keep your Honda owner's card with your Warranties Booklet.

Canada Please refer to the Warranty Booklet posted on our website at www.honda.ca.

It is important to realize that your warranty applies only to defects in material or

workmanship of your Honda. Your warranty coverage does not apply to the normal wear and deterioration associated with use of the vehicle.

Your warranty coverage is not voided if you perform your own maintenance. However, failures that occur due directly to improper maintenance are not covered by these warranties.

USA You can extend almost all of your warranty coverage through the Honda Protection Plan. For more information, see your Honda dealer.

Statement on Warranty Coverage for Aftermarket and Recycled Parts

New Jersey

The Magnuson-Moss Warranty Act, 15 U.S.C. s. 2301 et seq., makes it illegal for motor vehicle manufacturers to void a motor vehicle warranty or deny warranty coverage solely because an aftermarket or recycled part has been used to repair the vehicle or someone other than the authorized service provider performed service on the vehicle. This provision does not apply to a new motor vehicle purchased solely for commercial or industrial use.

Under federal law, a manufacturer may deny warranty coverage and charge for repairs to a vehicle if it is discovered that an aftermarket or recycled part installed on the vehicle is defective or was installed incorrectly and caused damage to another part of the vehicle otherwise covered under warranty. The Federal Trade Commission requires that a manufacturer demonstrate that an aftermarket or recycled part or service

performed by a person other than an authorized service provider caused damage to another part of the vehicle otherwise covered under warranty before denying warranty coverage. Additionally, federal law allows a manufacturer to void a motor vehicle warranty or deny warranty coverage if the manufacturer provides the article or service to consumers free of charge under the warranty or the manufacturer has secured a waiver from the Federal Trade Commission.

Service

Please remember that maintenance recommended in the Maintenance Schedule is not included in your warranty coverage.

If you believe you have a problem with your vehicle, call the service department of your Honda dealer. Make an appointment for an inspection and diagnosis. You will be asked to authorize that inspection, and your dealer will return the results of the inspection. If a problem exists and is covered under warranty, your dealer will perform the warranty repairs. If you have any questions about your warranty coverage or the nature of the repair, talk to the Service Manager of your Honda dealer.

If a misunderstanding occurs and you aren't satisfied with your dealer's handling of the situation, we suggest you discuss your problem with the appropriate member of the dealership's management team. If you are still not satisfied, contact the owner of the dealership or their designated representative.

Honda Contacts

American Honda Motor Co., Inc.

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

Powersports Customer Relations American Honda Motor Co., Inc., P.O. Box 2200, Torrance,

CA 90509-2200

Mailstop: 100-4W-5F,

Telephone: (866) 784-1870

Website: https://powersports.honda.com/

contact-us

Canada

Honda Canada Inc. Customer Relations Department, 180 Honda Boulevard Markham, Ontario L6C 0H9 Telephone: (888) 946-6329

Fax: (877) 939-0909

E-mail: honda cr@ch.honda.com

Please include the following information in your letter:

- Name, address, and telephone number
- Product model, year, and VIN
- Date of purchase
- Dealer name and address

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

Your Honda Dealer

The service department of your Honda dealer offers trained personnel to perform regular maintenance and unexpected repairs. It has the latest available service information from Honda and also handles warranty inspections and repairs.

The parts department offers Honda Genuine Parts, Pro Honda products, Honda Genuine Accessories (USA only), and Honda accessories and products (Canada only) that provide the same quality that went into your vehicle.

USA The sales department offers the Honda Protection Plan to extend almost all of your warranty coverage.

Your Honda dealer can also supply information about, riding events, and information about safety training available in your local area.

Reporting Safety Defects

USA

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

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

dealer, or American Honda Motor Co., Inc.

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

about motor vehicle safety from: http://www.safercar.gov.

Canada

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Honda Canada Inc. and you may also inform Transport Canada.

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

To contact Transport Canada's Defect Investigations and Recalls Division, you may call:

1-800-333-0510

For more information on reporting safety defects or about motor vehicle safety, go to http://www.tc.qc.ca/roadsafety.

Specifications

■ Main Components

Overall length	83.5 in (2,120 mm)
Overall width	31.1 in (789 mm)
Overall height	42.9 in (1,090 mm)
Wheelbase	57.3 in (1,455 mm)
Minimum ground clearance	5.3 in (135 mm)
Caster angle	25°
Trail	3.9 in (100 mm)
Curb weight	472 lb (214 kg)
Maximum weight capacity *1	384 lb (174 kg)
Passenger capacity	Rider and 1 passenger
Minimum turning radius	9.8 ft (3.00 m)
Displacement	60.9 cu-in (998 cm ³)
Bore x stroke	2.95 x 2.22 in (75.0 x 56.5 mm)
Compression ratio	11.6 : 1
Fuel	Unleaded gasoline
ruei	Recommended: 86 PON or higher
Tank capacity	4.28 US gal (16.2 L)
Battery	YTZ10S
Dattery	12 V-8.6 Ah (10 HR)

	1st	2.538	
	2nd	1.941	
Gear ratio	3rd	1.578	
Geal Tallo	4th	1.363	
	5th	1.217	
	6th	1.115	
Reduction ratio (primary / final)	1.604 / 2	2.933	

^{*1:} Including rider, passenger, all luggages, and accessories

■ Service Data

= Service Da	tu	
Tire size	Front	120/70ZR17M/C (58W)
Tire Size	Rear	190/55ZR17M/C (75W)
Tire type		Radial, tubeless
	Front	MICHELIN POWER 5
Recommended	FIOIIL	PIRELLI DIABLO ROSSO III E
Tire	Rear	MICHELIN POWER 5
	Real	PIRELLI DIABLO ROSSO III E
Tire air proceure	Front	36 psi (250 kPa, 2.50 kgf/cm²)
Tire air pressure	Rear	42 psi (290 kPa, 2.90 kgf/cm²)
Minimum tread	Front	0.06 in (1.5 mm)
depth	Rear	0.08 in (2.0 mm)
Spark plug	(standard)	IMR9E-9HES (NGK) or
spark plug	(Stallualu)	VUH27ES (DENSO)
Spark plug gap		0.03 - 0.04 in (0.8 - 0.9 mm)
Idle speed	(non- adjustable)	1,200 ± 100 rpm

Recommended engine oil	except oils labeled resource conservin service label, SAE standard MA, Pro l	cation SG or higher as energy conserving or gg on the circular API 10W-30, JASO T 903 Honda GN4 4-stroke oil r Honda 4-stroke oil, or orcycle oil	
	After draining	2.7 US qt (2.6 L)	
Engine oil capacity	After draining & engine oil filter change	3.1 US qt (2.9 L)	
	After disassembly	3.7 US qt (3.5 L)	
Recommended brake fluid	Honda DOT 4 Brak	e Fluid	
Cooling system capacity	2.91 US qt (2.75 L)		
Recommended coolant	Pro Honda HP Coolant		
Recommended drive chain lubricant	Pro Honda HP Cha	in Lube or equivalent	
Drive chain slack	1 3/4 - 2 in (45 - 5	0 mm)	
Standard drive	RK525ROZ7		
chain	No. of links	116	
Standard sprocket	Drive sprocket	15T	
size	Driven sprocket	44T	
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Specifications

■ Bulb

Headlight	LED
Brake light/Taillight	LED
Front turn signal/Position light	LED
Rear turn signal	LED
License plate light	LED

■ Fuse

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

Information Record

VIN
Engine No.
Color Label & Code
Owner's Name
Address
City/State
Phone
Dealer's Name
Address
City/State
Phone
Service Manager

California Proposition 65 Warning

▲ WARNING: Operating, servicing and maintaining a passenger vehicle or off-highway motor vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.

HONDA The Power of Dreams



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