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

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

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### Welcome

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

To ensure your safety and riding pleasure:

- Read this owner's manual carefully.
   Follow all recommendations and
- procedures contained in this manual.
- Pay close attention to safety messages contained in this manual and on the motorcycle.

- The following codes in this manual indicate each country.
- The illustrations here in are based on the CRF250RLA ED type.

#### **Country Codes**

# Code Country

CKFZ5UKLA	1
ED	European direct sales
KO	Korea
U	Australia, New Zealand

<sup>\*</sup>The specifications may vary with each locale.

### A Few Words About Safety

Your safety, and the safety of others, is very important. Operating this motorcycle safely is an important responsibility.

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

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

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

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

### **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:

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

## Contents

Motorcycle Safety	P. 2	
Operation Guide	P. 20	
Operation duide	1.20	
Maintenance	P. 37	
Troubleshooting	P. 81	
Housieshooting	1.01	
Information	P. 101	
Specifications	P. 113	
Index	P. 116	

# **Motorcycle Safety**

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

Safety Guidelines	P. 3
Image Labels	P. 7
Safety Precautions	
Riding Precautions	
Accessories & Modifications	P. 17
Off-Road Safety	
Loading	
=g	

## **Safety Guidelines**

Follow these guidelines to enhance your safety:

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

#### **Always Wear a Helmet**

It's a proven fact: helmets and protective apparel significantly reduce the number and severity of head and other injuries. So always wear an approved motorcycle helmet and protective apparel. P. 12

#### **Before Riding**

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

#### Take Time to Learn & Practice

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

#### **Ride Defensively**

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

#### **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.

#### **Be Alert for Off-road Hazards**

The terrain can be present a variety of challenges when you ride off-road.

Continually "read" the terrain for unexpected turns, drop-offs, rocks, ruts and other hazards. Always keep your speed low enough to allow time to see and react to hazards.

#### **Ride within Your Limits**

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

#### **Don't Drink and Ride**

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

#### **Keep Your Honda in Safe Condition**

It's important to keep your motorcycle properly maintained and in safe riding condition. Having a breakdown can be difficult, especially if you are stranded off-road far from your base. Inspect your motorcycle before every ride and perform all recommended maintenance. Never exceed load limits (2) P. 19), and do not modify your motorcycle or install accessories that would make your motorcycle unsafe (2) P. 17).

#### 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 motorcycle. Inspect for fluid leaks, check the tightness of critical nuts and bolts, and check the handlebar. control levers, brakes, and wheels. Ride slowly and cautiously.

Your motorcycle may have suffered damage that is not immediately apparent. Have your motorcycle thoroughly checked at a qualified service facility as soon as possible.

#### **Carbon Monoxide Hazard**

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

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

Never run your motorcycle inside a garage or other enclosure.

#### AWARNING

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

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

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

### **Image Labels**

#### Except KO type

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

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

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



Read instructions contained in Owner's Manual carefully.



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

#### **DANGER (with RED background)**

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



WARNING (with ORANGE background)

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

#### **CAUTION (with YELLOW background)** You CAN be HURT if you don't follow

instructions.



# BATTERY LABEL DANGER

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



#### **RADIATOR CAP LABEL DANGER** NEVER OPEN WHEN HOT.

Hot coolant will scald you.

Relief pressure valve begins to open at 1.1 kgf/cm².



# ACCESSORIES AND LOADING WARNING LABEL WARNING

ACCESSORIES AND LOADING

- The safety stability and handling of this motorcycle may be affected by the addition of accessories and luggage.
- Read carefully the instructions contained in user's manual and installation guide before installing any accessory.
- The total weight of accessories and luggage added to rider's and passenger's weight should not exceed 159 kg (351 lb), which is the maximum weight capacity.
- The luggage weight must not exceed 4.5 kg (10 lb) under any circumstances.
- The fitting of large fork-mounted or large handlebar mounted fairing is not recommended.

#### TYRE INFORMATION & DRIVE CHAIN LABEL

Cold tyre pressure:

[Driver only]

Front 150 kPa (1.50 kgf/cm², 22 psi)

Rear 150 kPa (1.50 kgf/cm<sup>2</sup>, 22 psi)

[Driver and passenger]

Front 150 kPa (1.50 kgf/cm<sup>2</sup>, 22 psi)

Rear 175 kPa (1.75 kgf/cm<sup>2</sup>, 25 psi)

Keep chain adjusted and lubricated. Freeplay 40 - 50 mm (1.6 - 2.0 in)









or



#### **SAFETY REMINDER LABEL**

For your protection, always wear helmet, protective apparel.

#### **FUEL LABEL**

Unleaded petrol only ETHANOL up to 10 % by volume



#### Safety Precautions

## **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 motorcycle helmet, eye protection, and high-visibility protective clothing. Ride defensively in response to weather and road conditions.

#### **I** Helmet

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

• Must fit comfortably but securely, with the chin strap fastened.

 Face shield with unobstructed field of vision or other approved eye protection.

### 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.

#### **I** Jacket and Trousers

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

#### ■ Additional Off-road Gear

On-road apparel may also be suitable for casual off-road riding. But if you plan on any serious off-road riding you will need more serious offroad gear. In addition to your helmet and eye protection, we recommend off-road motorcycle boots and gloves, riding pants with knee and hip pads, a jersey with elbow pads, and a chest/ shoulder protector.

# **Riding Precautions**

#### **Running-in Period**

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

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

#### **Brakes**

Observe the following guidelines:

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

#### Anti-lock Brake System (ABS)

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

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

#### Engine Braking

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

#### **■** Wet or Rainy Conditions

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

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

#### **Parking**

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

#### Parking with the Side Stand

- 1. Stop the engine.
- 2. Push the side stand down

**3.** Slowly lean the motorcycle to the left until its weight rests on the side stand.

reduces stability and may cause the

4. Turn the handlebar fully to the left.Turning the handlebar to the right

motorcycle to fall.

5. Turn the ignition switch to the ☐ (Lock) position and remove the key. ► P. 30

#### **Refuelling and Fuel Guidelines**

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

- Use only unleaded petrol.
- Use recommended octane number. Using lower octane petrol will result in decreased engine performance.
- Do not use fuels containing a high concentration of alcohol. ▶ P. 111
- Do not use stale or contaminated petrol or an oil/petrol mixture.
- Avoid getting dirt or water in the fuel tank.

**Accessories & Modifications** 

# Accessories & Modifications

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

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

#### Off-Road Safety

## **Off-Road Safety**

Learn to ride in an uncongested off-road area free of obstacles before venturing onto unfamiliar terrain.

- Always obey local off-road riding laws and regulations.
- Obtain permission to ride on private property. Avoid posted areas and obey "NO Trespassing" signs.
- Ride with a friend on another motorcycle so that you can assist each other in case of trouble.
- Familiarity with your motorcycle is critically important should a problem occur far from help.
- Never ride beyond your ability and experience or faster than conditions warrant.
- If you are not familiar with the terrain, ride cautiously. Hidden rocks, holes, or ravines could spell disaster.

 A muffler is required in most off-road areas. Don't modify your exhaust system.
 Remember that excessive noise bothers everyone and creates a bad image for motorcycling.

#### Loading

## Loading

- Carrying extra weight affects your motorcycle's handling, braking and stability.
   Always ride at a safe speed for the load you are carrying.
- Avoid carrying an excessive load and keep within specified load limits.

#### Maximum weight capacity **≥** P. 113

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

Also follow these guidelines when you ride offroad on rough terrain:

- Do not carry a passenger.
- Keep cargo small and light weight.
   Make sure it cannot easily be caught on brush or other objects, and that it does not interfere with your ability to shift position to maintain balance and stability.

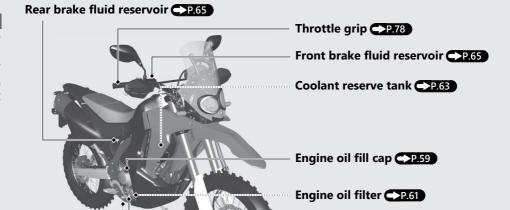
#### **AWARNING**

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

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

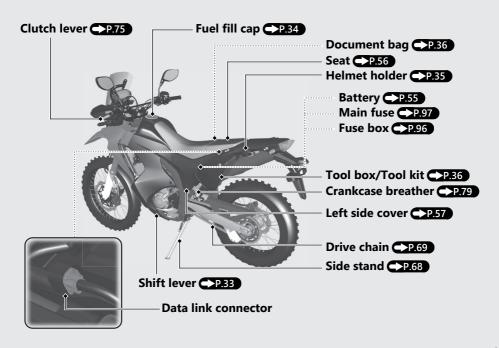
# **Parts Location**

Engine oil drain bolt P.61

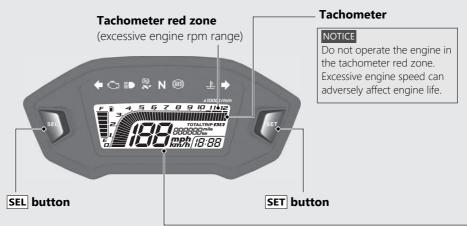


**Engine oil level inspection** 

window P.59

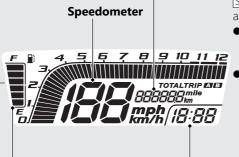


# **Instruments**



#### **Display Check**

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



#### Odometer [TOTAL] & Tripmeter[TRIP A/B]

SEL button switches between the odometer and tripmeters.

- Odometer: Total distance ridden. When "----" is displayed, go to your dealer for service.
- Tripmeter: Distance ridden since tripmeter was reset (press and hold SET button to reset to 0.0 km/mile at the tripmeter display). When "-----" is displayed, go to your dealer for service

#### Clock (12-hour display)

#### Fuel gauge

Remaining fuel when only 1st (E) segment starts flashing: approximately 1.6 L (0.42 US gal, 0.35 Imp gal)

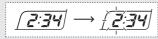
If the fuel gauge indicator flashes in a

repeat pattern or turns off: P.85

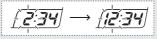


#### **Instruments** (Continued)

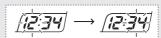
- 1 To set the clock:
- 1 Turn the ignition switch to the (On) position.
- 2 Press and hold the SEL button and the SET button until the hour digits start flashing.



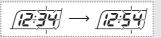
- 3 Press the SEL button until the desired hour is displayed.
  - Press and hold to advance the hour fast.



4 Press the SET button. The minute digits start flashing.



- **5** Press the SEL button until the desired minute is displayed.
  - Press and hold to advance the minute fast.



#### 6 ED type

Press the SET button. The clock is set, and then the display moves to the changing of the speed and mileage unit.

#### KO, U type

Press the SET button. The clock is set, and then the display will return to the ordinary display.

► The adjustment can also be set by turning the ignition switch to the **(**Off) position.

If no buttons were pressed for about 30 seconds, the display will stop flashing automatically and the adjustment will be cancelled.

#### 2 Changing the speed and mileage unit:

#### ED type only

1 Press the SEL button to select either "km/h" & "km" or "mph" & "mile" for the speedometer, odometer and tripmeters.



2 Press the SET button. The speed and mileage unit is set, and then the display will return to the ordinary display.

# **Indicators**

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

#### Rear ABS (Anti-lock Brake System) OFF indicator

Comes on briefly when the ignition switch is turned to the (On) position. Comes on when the ABS function on the rear wheel is turned off

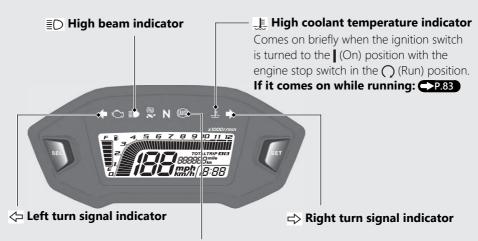


Neutral indicator
Comes on when the
transmission is in Neutral

#### PGM-FI (Programmed Fuel Injection) malfunction indicator lamp (MIL)

Comes on briefly when the ignition switch is turned to the  $\blacksquare$  (On) position with the engine stop switch in the  $\bigcirc$  (Run) position.

If it comes on while engine is running: P.84

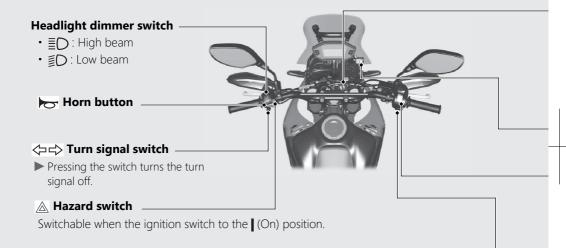


( ABS (Anti-lock Brake System) indicator

Comes on when the ignition switch is turned to the (On) position. Goes off when your speed reaches approximately 10 km/h (6 mph).

If it comes on while riding: P.84

# **Switches**



#### **Ignition Switch**

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

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

#### Steering Lock: P.30

(On)

Turns electrical system on for starting/riding.



Turns engine off.



Locks steering.



Rear ABS switch

Switches the ABS function on the rear wheel on/off. P.31

#### **Engine stop switch**

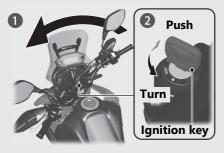
Should normally remain in the () (run) position.

- ▶ In an emergency, switch to the 🂢 (Off) position (the starter motor will not operate) to stop the engine.
- Start button

# **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  $\bigcirc$  (Off) position.

# **ABS function on the rear wheel**

The ABS function on the rear wheel can be optionally turned off for off-road riding.

► Each time the ignition switch is turned to the (On) position, the ABS function on both wheels will automatically be turned on.

# To turn off the ABS function on the rear wheel

- 1 Stop the motorcycle.
- Press and hold the rear ABS switch until the rear ABS OFF indicator starts flashing, then release the switch while the indicator is flashing.
  - The rear ABS OFF indicator is on, when the ABS function on the rear wheel is turned off
  - ➤ The ABS function on the rear wheel remains on, if the switch is released after indicator stops flashing.

# To turn on the ABS function on both wheels

- 1 Stop the motorcycle.
- 2 Press and hold the rear ABS switch until the rear ABS OFF indicator is turned off, or turn the ignition switch to the (Off) position and the (On) position.







ABS function on both wheels is on.

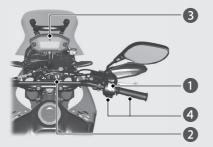
ABS function on rear wheel is off.

Rear ABS 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.
- 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 to come on). Alternatively, pull in the clutch lever to start your motorcycle with the transmission in gear so long as the side stand is raised.
- 4 Press the start button with the throttle completely closed.

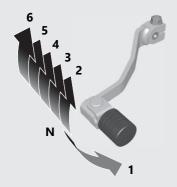
#### If the engine does not start:

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

### If Engine Will Not Start →P.82

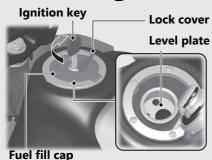
# **Shifting Gears**

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



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

# Refuelling



Do not fill with fuel above the level plate.

**Fuel type:** Unleaded petrol only

Fuel octane number: Your motorcycle is designed to use Research Octane Number (RON) 91 or higher.

# Tank capacity:

10.1 L (2.67 US gal, 2.22 Imp gal)

Refuelling and Fuel Guidelines P.16



### **Opening the Fuel Fill Cap**

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

### Closing the Fuel Fill Cap

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

# AWARNING

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

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

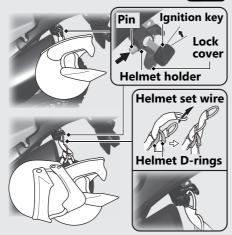
# **Storage Equipment**

#### **Helmet Holder**

The helmet holder is located on the left side of the motorcycle.

When hanging two helmets, use the helmet set wire.

► The helmet set wire is in the tool kit. →P.36



### Unlocking

Open the lock cover, insert the ignition key and turn it counterclockwise.

### Locking

- 1 Hang your helmet on the holder pin and push it in to lock.
- 2 Remove the key and close the lock cover.
  - ► Use the helmet holder only when parked.

### 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.

# **Storage Equipment** (Continued)

### **Document Bag**

The document bag is located under the seat.

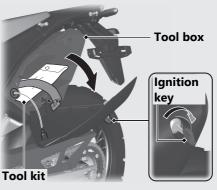
# **Document bag**



Removing the Seat P.56

#### **Tool Kit**

The tool kit is stored in the tool box located on the left side of the motorcycle.



► Insert the ignition key and turn it clockwise to open the tool box.

# Maintenance

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

Maintenance Schedule Maintenance Fundamentals	
Tool Kit	P. 54
Removing & Installing Body Component	<b>ts</b> P. 55
Battery	P. 55
Seat	P. 56
Left Side Cover	P. 57
Under Cowl	P. 58
Engine Oil	P. 59
Coolant	P. 63
Brakes	P. 65
Side Stand	P. 68
Drive Chain	P. 69

Importance of Maintenance ......P. 38

Wheels	P. 74
Clutch	P. 75
Throttle	P. 78
Crankcase Breather	P. 79
Other Adjustments	P. 80
Adjusting the Headlight Aim	

# Importance of Maintenance

### Importance of Maintenance

Keeping your motorcycle well-maintained is absolutely essential to your safety and to protect your investment, obtain maximum performance, avoid breakdowns, and reduce air pollution. Maintenance is the owner's responsibility. Be sure to inspect your motorcycle before each ride, and perform the periodic checks specified in the Maintenance Schedule. ▶ P. 39

# AWARNING

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

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

### **Maintenance Safety**

Always read the maintenance instructions before you begin each task, and make sure that you have the tools, parts, and skills required. We cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.

Follow these guidelines when performing maintenance.

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

# **Maintenance Schedule**

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

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

Make sure that whomever performs the maintenance completes this record.

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

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

#### Maintenance Schedule

Pro		Pre-ride	Frequency*1								
Items		Check	× 1,000 km	1	12	24	36	48	Annual Check	Regular Replace	
		<b>₽</b> P. 42	× 1,000 mi	0.6	8	16	24	32	Terreck	Replace	lo page
Fuel Line	1				I	I	I	I	I		-
Fuel Level											34
Throttle Operation	1										78
Air Cleaner*2	1					ß		B			53
Crankcase Breather*3					С	С	С	С			79
Spark Plug	1							®			-
Valve Clearance	1										-
Engine Oil				B	B	ß	B	R	R		61
Engine Oil Filter				ß		ß		ß			61
Engine Idle Speed	1										-
Radiator Coolant*5										3 Years	63
Cooling System	1										-
Secondary Air Supply System	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 Shop Manual.

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

#### **Maintenance Legend**

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

Lubricate:

R : Replace

C : Clean

#### Maintenance Schedule

ltems		Pre-ride Check ▶ P. 42	Frequency*1								
			× 1,000 km	1	12	24	36	48	Annual Check	Regular Replace	Refer to page
			× 1,000 mi	0.6	8	16	24	32			
Evaporative Emission Control System (KO type only)	1										-
Drive Chain*4				Every 1,000 km (600 mi):							69
Drive Chain Slider*4											73
Brake Fluid*5										2 Years	65
Brake Pads Wear											66
Brake System											42
Brakelight Switch											67
Headlight Aim								I	П		80
Lights/Horn											-
Engine Stop Switch											-
Clutch System											75
Side Stand											68
Suspension	1										-
Nuts, Bolts, Fasteners*4	1										-
Wheels/Tyres*4	*		Every 6,000 km (4,000 mi):								50, 74
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 : Service more frequently when riding OFF-ROAD.\*5 : Replacement requires mechanical skill.

### **Pre-ride Inspection**

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

Check the following items before you get on your motorcycle:

- Fuel level Fill fuel tank when necessary.
- ▶ P. 34Throttle Check for smooth opening and
- Coolant level Add coolant if required.
   Check for leaks. ▶ P. 63

- Drive chain Check condition and slack, adjust and lubricate if necessary. 

   P. 69
- Brakes Check operation; Front and Rear: check brake fluid level and pads wear. 
   ☐ P. 65, P. 66
- Lights and horn Check that lights, indicators and horn function properly.
- Engine stop switch Check for proper function. 

   ■ P. 29
- Clutch Check operation;
   Adjust freeplay if necessary. 

  P. 75
- Side stand ignition cut-off system Check for proper function. 

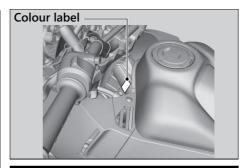
   P. 68

Before riding off-road check all of the preceding plus the following:

- Make sure spokes are tight. Check the rims for any damage. ▶ P. 74
  Be sure the fuel fill cap is securely fastened.
- P. 34
   Check for loose cables and other parts, and anything that appears abnormal.
- Use a wrench to check the tightness of all accessible nuts, bolts and fasteners.

### **Replacing Parts**

Always use Honda Genuine Parts or their equivalents to ensure reliability and safety. When ordering coloured components, specify the model name, colour, and code mentioned on the colour label. The colour label is attached to the left side of the front frame.



# **AWARNING**

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

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

#### **Battery**

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

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

#### NOTICE

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



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

#### NOTICE

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

# 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.

#### | Cleaning the Battery Terminals

- 1. Remove the battery. 
  ▶ P. 55
- 2. If the terminals are starting to corrode and are coated with a white substance, wash with warm water and wipe clean.

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



4. After cleaning, reinstall the battery.

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

#### NOTICE

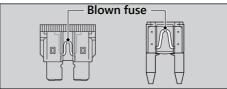
Installing non-Honda electrical accessories can overload the electrical system, discharging the battery and possibly damaging the system.

#### **Fuses**

Fuses protect the electrical circuits on your motorcycle. If something electrical on your motorcycle stops working, check for and replace any blown fuses. ▶ P. 96

#### 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. 115



#### 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 motorcycle inspected by your dealer.

### **Engine Oil**

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

Check the engine oil level regularly, and add the recommended engine oil if necessary. Dirty oil or old oil should be changed as soon as possible.

### Selecting the Engine Oil

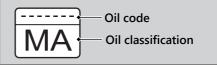
For recommended engine oil, see "Specifications." 

▶ P. 114

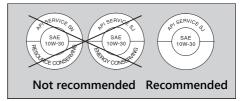
If you use non-Honda engine oil, check the label to make sure that the oil satisfies all of the following standards:

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

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



- \*2. The SAE standard grades oils by their viscosity.
- \*3. The API classification specifies the quality and performance rating of engine oils. Use SG or higher oils, excluding oils marked as "Energy Conserving" or "Resource Conserving" on the circular API service symbol.



#### **Brake Fluid**

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

#### NOTICE

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

#### Recommended brake fluid:

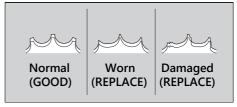
Honda DOT 3 or DOT 4 Brake Fluid or equivalent

#### **Drive Chain**

The drive chain must be inspected and lubricated regularly. Inspect the chain more frequently if you often ride on bad roads, ride at high speed, or ride with repeated fast acceleration. ▶ P. 69

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

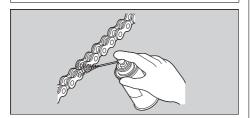
Use of a new chain with worn sprockets will cause rapid chain wear.

### 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:

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



Do not use a steam cleaner, a high pressure cleaner, a wire brush, volatile solvent such as petrol and benzene, abrasive cleaner, chain cleaner or lubricant NOT designed specifically for O-ring chains as these can damage the rubber O-ring seals.

Avoid getting lubricant on the brakes or tyres. Avoid applying excess chain lubricant to prevent spray onto your clothes and the motorcycle.

#### **Recommended Coolant**

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

#### Concentration:

50% antifreeze and 50% distilled water

A concentration of antifreeze below 40% will not provide proper corrosion and cold temperature protection.

A concentration of up to 60% will provide better protection in colder climates.

#### NOTICE

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

#### Crankcase Breather

Service more frequently when riding in rain, at full throttle, or after the motorcycle is washed or overturned. Service if the deposit level can be seen in the transparent section of the drain tube. If the drain tube overflows, the air filter may become contaminated with engine oil causing poor engine performance. **2** P. 79

# Tyres (Inspecting/Replacing)

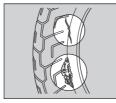
### | Checking the Air Pressure

Visually inspect your tyres and use an air pressure gauge to measure the air pressure before each off-road ride and whenever you return to pavement after riding off-road. If you only ride on pavement, check the pressure at

least once a month or any time you think the tyres look low. Always check air pressure when your tyres are cold.

If you decide to adjust the tyre pressure for a particular off-road riding condition, make changes a little at a time.

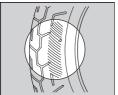
### Inspecting for Damage



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

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

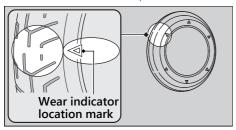
### Inspecting for Abnormal Wear



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

### Inspecting Tread Depth

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



#### Inspecting Rims and Valve Stems

Inspect the rims for damage and loose spokes. Also inspect the valve stems for their positions. A tilted valve stem indicates the tube is slipping inside the tyre or the tyre is slipping on the rim. See your dealer.

# **AWARNING**

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

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

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

**₽** P. 114

Follow these guidelines whenever you replace tyres.

- Use the recommended tyres or equivalents of the same size, construction, speed rating, and load range.
- Remember to replace the inner tube whenever you replace a tyre. The old tube will probably be stretched, and it could fail if installed in a new tyre.

### AWARNING

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

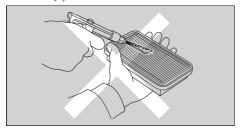
Always use the size and type of tyres recommended in this owner's manual.

#### **Air Cleaner**

This motorcycle is equipped with a viscous type air cleaner element.

Air blow cleaning or any other cleaning can degrade the viscous element performance and cause the intake of dust.

Do not perform the maintenance. Should be serviced by your dealer.



# **Tool Kit**

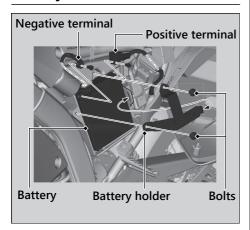
The tool kit is stored in the tool box. 
▶ P. 36

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

- Standard/Phillips screwdriver
- Screwdriver handle8 × 10 mm Open end wrench
- 12 × 14 mm Open end wrench
- 5 mm Hex wrench
- 6 mm Hex wrench
- Fuse puller
- Helmet set wire

# **Removing & Installing Body Components**

# **Battery**



### I Removal

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

1. Remove the left side cover. ▶ P. 57

- 2. Remove the bolts.
- 3. Remove the battery holder.
- **4.** Disconnect the negative 

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

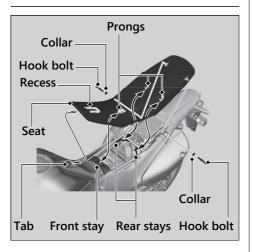
#### I Installation

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

Make sure the clock information is correct after the battery is reconnected. ▶ P. 24 For proper handling of the battery, see "Maintenance Fundamentals." ▶ P. 45 "Battery Goes Dead." ▶ P. 92

#### Removing & Installing Body Components ► Seat

# Seat



#### Removal

- 1. Remove the hook bolts and collars.
- 2. Pull the seat back and up.

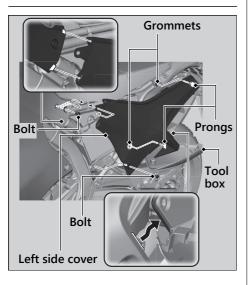
### **I** Installation

- **1.** Align the recess with the tab and insert the prongs into the front stay and rear stays.
- **2.** Install the collars onto the hook bolts. Tighten the hook bolts.

**Torque:** 21 N·m (2.1 kgf·m, 15 lbf·ft)

#### Removing & Installing Body Components ► Left Side Cover

# **Left Side Cover**



### | Removal

- 1. Open the tool box. ▶ P. 36
- 2. Remove the bolts.
- **3.** Remove the prongs from the grommets.
- **4.** Remove the left side cover.

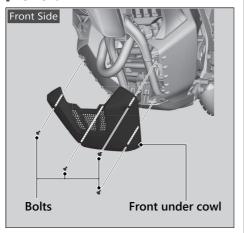
### **I** Installation

Install the parts in the reverse order of removal

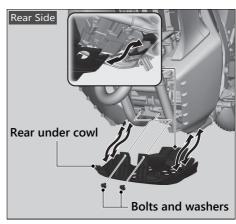
Removing & Installing Body Components ▶ Under Cowl

# **Under Cowl**

### | Removal



1. Remove the bolts and front under cowl.



- **2.** Remove the bolts and washers on rear under cowl.
- 3. Remove the rear under cowl.

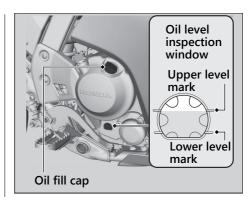
# **Installation**

Install the parts in the reverse order of removal.

# **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 motorcycle in an upright position on a firm, level surface.
- **4.** Check that the oil level is between the upper level and lower level marks in the oil level inspection window.



Engine Oil ► Adding Engine Oil

# **Adding Engine Oil**

If the engine oil is below or near the lower level mark, add the recommended engine oil. ▶ P. 47, ▶ P. 114

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

#### NOTICE

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

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

P. 47

# **Changing Engine Oil & Filter**

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

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

#### NOTICE

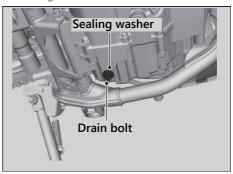
Using the wrong oil filter can result in serious damage to the engine.

- 1. Remove the under cowl 

   P 58
- 2. If the engine is cold, idle the engine for 3 to 5 minutes
- **3.** Turn the ignition switch to the **(**Off) position and wait for 2 to 3 minutes.
- 4. Place your motorcycle on a firm, level surface

### Engine Oil ► Changing Engine Oil & Filter

- 5. Place a drain pan under the drain bolt.
- 6. Remove the oil fill cap, drain bolt, and sealing washer to drain the oil.



- 7. Remove the oil filter cover, oil filter, spring and gasket by removing the oil filter cover holts
  - Discard the oil and oil filter at an approved recycling centre.

#### Engine Oil ► Changing Engine Oil & Filter

- **8.** Install a new oil filter with the "OUT-SIDE" mark facing out.
- Install the spring into the oil filter cover, and then install a new gasket and oil filter cover by tightening the oil filter cover bolts.

Torque: 10 N·m (1.0 kgf·m, 7 lbf·ft)

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

Torque: 24 N·m (2.4 kgf·m, 18 lbf·ft)

**11.** Fill the crankcase with the recommended oil (▶ P. 47, ▶ P. 114) and install the oil fill cap.

# Required oil

When changing oil & engine oil filter:

1.5 L (1.6 US qt, 1.3 Imp qt)

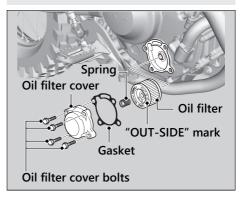
When changing oil only:

1.4 L (1.5 US qt, 1.2 Imp qt)

- 12. Check the oil level. 
  ▶ P. 59
- 13. Check that there are no oil leaks.
- 14. Install the under cowl. 
  ▶ P. 58

#### NOTICE

Improper installation of the oil filter can result in serious damage to the engine.



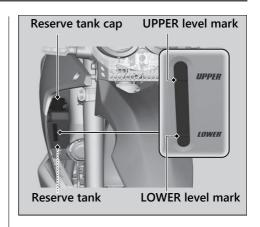
# Coolant

# **Checking the Coolant**

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

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

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



Coolant ► Adding Coolant

# **Adding Coolant**

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

(▶ P. 49) 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.

# **Changing Coolant**

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

# **Brakes**

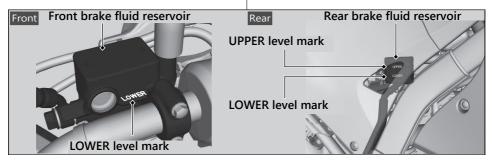
# **Checking Brake Fluid**

- **1.** Place your motorcycle in an upright position on a firm, level surface.
- 2. Front Check that the brake fluid reservoir is horizontal and that the fluid level is above the LOWER level mark.

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



Brakes ► Inspecting the Brake Pads

# **Inspecting the Brake Pads**

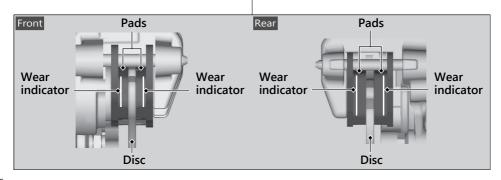
Check the condition of the brake pad wear indicators.

The pads need to be replaced if a brake pad is worn to the indicator.

- **1.** Front Inspect the brake pads from below the brake caliper.
- **2.** Rear Inspect the brake pads from the rear right of the motorcycle.

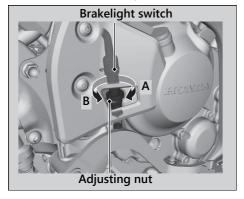
If necessary have the pads replaced by your dealer.

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



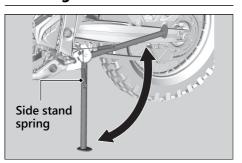
# **Adjusting the Brakelight Switch**

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



# **Side Stand**

# **Checking the Side Stand**



- 1. Check that the side stand operates smoothly. If the side stand is stiff or squeaky, clean the pivot area and lubricate the pivot bolt with clean grease.
- **2.** Check the spring for damage or loss of tension.
- **3.** Sit on the motorcycle, put the transmission in Neutral, and raise the side stand.

- **4.** Start the engine, pull the clutch lever in, and shift the transmission into gear.
- **5.** Lower the side stand all the way. The engine should stop as you lower the side stand. If the engine doesn't stop, have your motorcycle inspected by your dealer.

# **Drive Chain**

# **Inspecting the Drive Chain Slack**

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

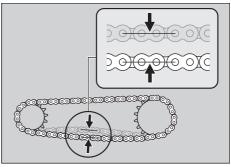
Have the chain inspected by your dealer.

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

#### **Drive chain slack:**

40 - 50 mm (1.6 - 2.0 in)

▶ Do not ride your motorcycle if the slack exceeds 60 mm (2.4 in).



- **4.** Roll the motorcycle forward and check that the chain moves smoothly.
- 5. Inspect the sprockets. ▶ P. 48
- **6.** Clean and lubricate the drive chain. **▶** P. 49

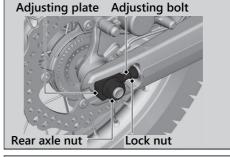
Drive Chain ► Adjusting the Drive Chain Slack

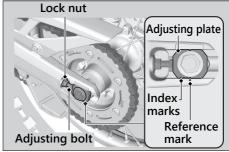
# Adjusting the Drive Chain Slack

Adjusting the chain requires special tools. Have the drive chain slack adjusted by your dealer.

When adjusting the drive chain slack, be careful not to damage the wheel speed sensor and pulser ring.

- **1.** Shift the transmission to Neutral. Stop the engine.
- **2.** Place your motorcycle on its side stand on a firm, level surface.
- 3. Loosen the rear axle nut.
- **4.** Loosen the lock nuts on both adjusting bolts.





5. Turn both adjusting bolts an equal number of turns until the correct drive chain slack is obtained. Turn the adjusting bolts counterclockwise to tighten the

chain. Turn the adjusting bolts clockwise

and push the rear wheel forward to provide more slack. Adjust the slack at a point midway

between the drive sprocket and the driven wheel sprocket.

Check the drive chain slack ▶ P 69

6. Check rear axle alignment by making sure the index marks on the chain adjusting plate aligns with the reference mark on both sides of the swingarm. Both marks should correspond. If the axle

is misaligned, turn the right or left adjusting bolt until the marks are aligned and recheck chain slack

#### Drive Chain ► Adjusting the Drive Chain Slack

7. Tighten the rear axle nut.

Torque: 88 N·m (9.0 kgf·m, 65 lbf·ft)

8. Hold the adjusting bolts and tighten the lock nuts

Torque: 27 N·m (2.8 kgf·m, 20 lbf·ft)

9. Recheck drive chain slack.

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

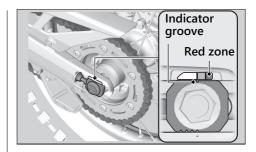
Drive Chain ► Adjusting the Drive Chain Slack

#### | Checking the Drive Chain Wear

Check the chain wear label when adjusting the drive chain. If the indicator groove on the chain adjuster plate enters the red zone on the label after the chain has been adjusted to the proper slack, the chain is excessively worn and must be replaced.

#### Chain: DID 520VF

If necessary have the drive chain replaced by your dealer.

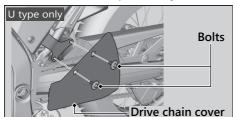


# **Checking the Drive Chain Slider**

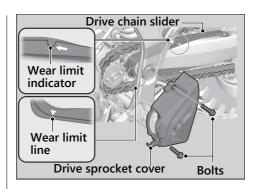
Check the condition of the drive chain slider. The drive chain slider will need to be replaced if the chain slider is worn to the wear limit indicator or wear limit line. To inspect the wear limit line, remove the drive sprocket cover by removing the bolts. If necessary have the drive chain slider replaced by your dealer.

#### U type only

To inspect the wear limit indicator, remove the drive chain cover by removing the bolts.



#### Drive Chain ► Checking the Drive Chain Slider



#### Wheels

# Wheels Rims & Spokes

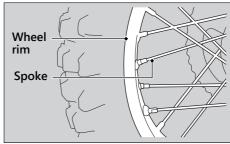
Keeping the wheels true (round) and maintaining correct spoke tension is critical to safe motorcycle operation.

Excessively loose spokes may result in instability at high speeds and possible loss of control.

It is not necessary to remove the wheels to perform the recommended service in the Maintenance Schedule. However, information for wheel removal is provided for emergency situations. **2** P. 86

- **1.** Inspect the wheel rims and spokes for damage.
- 2. Tighten any loose spokes.

**3.** Rotate the wheel slowly to see if it appears to "wobble." If it does, the rim is out of round or not "true." If the wobble is noticeable, see your dealer for inspection.



## Clutch

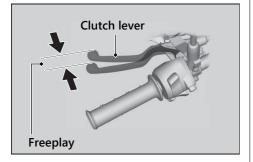
# **Checking the Clutch**

## | Checking the Clutch Lever Freeplay

Check the clutch lever freeplay.

#### Freeplay at the clutch lever:

10 - 20 mm (0.4 - 0.8 in)



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

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

#### NOTICE

Improper freeplay adjustment can cause premature clutch wear.

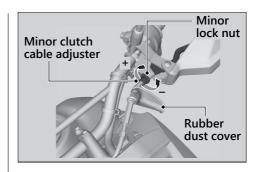
Clutch ► Adjusting the Clutch Lever Freeplay

# Adjusting the Clutch Lever Freeplay

## | Minor Adjustment

Attempt adjustment with the minor clutch cable adjuster first.

- 1. Pull back the rubber dust cover.
- 2. Loosen the minor lock nut.
- **3.** Turn the minor clutch cable adjuster until the freeplay is 10 20 mm (0.4 0.8 in).
- **4.** Tighten the minor lock nut and check the freeplay again.
- 5. Install the rubber dust cover.



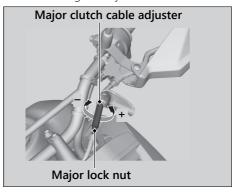
## | Major Adjustment

If the minor clutch cable adjuster is threaded out near its limit, or the correct freeplay cannot be obtained, attempt adjustment with the major clutch cable adjuster.

- Pull back the rubber dust cover. Loosen the minor lock nut and turn the minor clutch cable adjuster all the way in (to provide maximum freeplay). Tighten the minor lock nut. Install the rubber dust cover.
- 2. Loosen the major lock nut.
- **3.** Turn the major clutch cable adjuster until the clutch lever freeplay is 10 20 mm (0.4 0.8 in).
- **4.** Tighten the major lock nut and check the clutch lever freeplay.
- **5.** Start the engine, pull the clutch lever in, and shift into gear. Make sure the engine does not stall and the motorcycle does

#### Clutch ► Adjusting the Clutch Lever Freeplay

not creep. Gradually release the clutch lever and open the throttle. Your motorcycle should move smoothly and accelerate gradually.



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

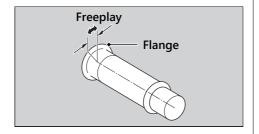
#### **Throttle**

# **Checking the Throttle**

With the engine off, check that the throttle rotates smoothly from fully closed to fully open in all steering positions and throttle freeplay is correct. If the throttle does not move smoothly, close automatically, or if the cable is damaged, have the motorcycle inspected by your dealer.

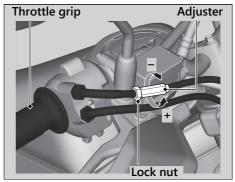
#### Freeplay at the throttle grip flange:

2 - 6 mm (0.1 - 0.2 in)



# **Adjusting the Throttle Freeplay**

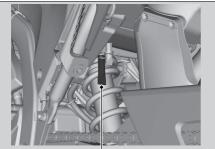
- 1. Loosen the lock nut
- 2. Turn the adjuster until the freeplay is 2 6 mm (0.1 0.2 in).
- **3.** Tighten the lock nut and inspect the throttle action again.



## **Crankcase Breather**

# **Cleaning the Crankcase Breather**

- **1.** Place a suitable container under the crankcase breather tube.
- **2.** Remove the crankcase breather tube and drain deposits.
- 3. Reinstall the crankcase breather tube.



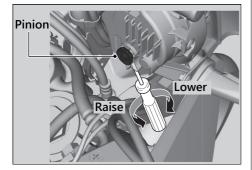
Crankcase breather tube

# **Other Adjustments**

# **Adjusting the Headlight Aim**

You can adjust vertical aim of the headlight for proper alignment. Turn the pinion using a Phillips screwdriver provided in the tool kit (2 P. 54) in or out as necessary.

Obey local laws and regulations.



P 82

# **Troubleshooting**

Overheating (High coolant temperature	
indicator is on)	P. 83
Warning Indicators On	P. 84
PGM-FI (Programmed Fuel Injection)	
Malfunction Indicator Lamp (MIL)	P. 84
ABS (Anti-lock Brake System) Indicator	P. 84
Other Warning Indications	<b></b> P. 85
Fuel Gauge Failure Indication	P. 85
Tyre Puncture	P. 86
Electrical Trouble	<b></b> P. 92
Battery Goes Dead	P. 92
Burned-out Light Bulb	P. 92
Blown Fuse	P. 96

**Engine Will Not Start** 

Unstable Engine Operation Occurs
Intermittently......P. 100

# **Engine Will Not Start**

# **Starter Motor Operates But Engine Does Not Start**

Check the following items:

- Check the correct engine starting sequence. ▶ P. 32
- Check that there is petrol in the fuel tank.
- Check if the PGM-FI malfunction indicator lamp (MIL) is on.
  - ► If the indicator light 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. 32
- Make sure engine stop switch is in the 
   (Run) position. 
   ▶ P. 29
- Check for a blown fuse. ▶ P. 96
- Check for a loose battery connection or battery terminal corrosion. ▶ P. 45,

**₽** P. 55

- Check the condition of the battery.▶ P. 92
- If the problem continues, have your motorcycle inspected by your dealer.

# Overheating (High coolant temperature indicator is on)

The engine is overheating when the following occurs:

- High coolant temperature indicator comes on.
- Acceleration becomes sluggish. If this occurs, pull safely to the side of the road and perform the following procedure. Extended fast idling may cause the high coolant temperature indicator to come on.

#### NOTICE

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

- Stop the engine using the ignition switch, and then turn the ignition switch to the I (On) position.
- 2. Check that the radiator fan is operating, and then turn the ignition switch to the O (Off) position.

#### If the fan is not operating:

Suspect a fault. Do not start the engine. Transport your motorcycle to your dealer.

#### If the fan is operating:

Allow the engine to cool with the ignition switch in the  $\bigcirc$  (Off) position.

**3.** After the engine has cooled, inspect the radiator hose and check if there is a leak. **▶** P. 63

#### If there is a leak:

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

- **4.** Check the coolant level in the reserve tank. P. 63
  - 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

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

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

# ABS (Anti-lock Brake System) Indicator

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

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

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

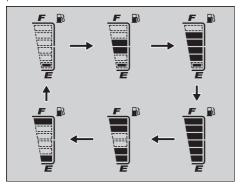
The ABS indicator may flash if you turn the rear wheel while your motorcycle is lifted off the ground. In this case, turn the ignition switch to the  $\bigcirc$  (Off) position, and then to the  $|\!|$  (On) position again. The ABS indicator will go off after your speed reaches 30 km/h (19 mph).

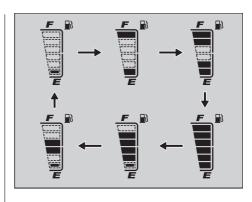
# **Other Warning Indications**

# **Fuel Gauge Failure Indication**

If the fuel system has an error, the fuel gauge indicators will be displayed as shown in the illustration.

If this occurs, see your dealer as soon as possible.





## Tyre Puncture

Repairing a puncture or removing a wheel requires special tools and technical expertise. We recommend you have this type of service performed by your dealer.

After an emergency repair, always have the tyre inspected/replaced by your dealer.

# **Tube Repair and Replacement**

If a tube is punctured or damaged, you should replace it as soon as possible. A tube that is repaired may not have the same reliability as a new one, and it may fail while you are riding.

If you need to make a temporary repair by patching a tube or using an aerosol sealant, ride cautiously at reduced speed and have the tube replaced before you ride again. Anytime a tube is replaced, the tyre should be carefully inspected as described.

## AWARNING

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

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

# **Removing Wheels**

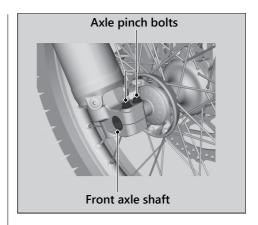
Follow these procedures if you need to remove a wheel in order to repair a puncture.

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

#### I Front Wheel

#### Removal

- 1. Place your motorcycle on a firm, level surface
- 2. Loosen the axle pinch bolts.
- 3. Loosen the front axle shaft.
- 4. Support your motorcycle securely and raise the front wheel off the ground using a maintenance stand or a hoist.
- 5. Remove the front axle shaft, side collars and wheel.
  - Avoid getting grease, oil, or dirt on the disc or pad surfaces.
  - Do not pull the brake lever while the brake caliper is removed.



#### Installation

- **1.** Attach the side collars to the wheel.
- 2. On the right side, place the wheel between the fork legs and insert the front axle shaft, through the right fork leg and wheel hub.
  - Avoid scratching the brake pads, carefully fit the brake disc between the pads.

#### NOTICE

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

3. Tighten the axle shaft.

Torque: 69 N·m (7.0 kgf·m, 51 lbf·ft)

- 4. Lower the front wheel on the ground.
- **5.** Apply the brake lever several times. Then, pump the fork several times.

**6.** Tighten the axle pinch bolt.

Torque: 22 N·m (2.2 kgf·m, 16 lbf·ft)

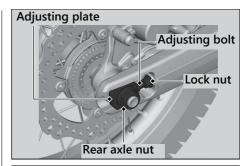
- **7.** Raise the front wheel off the ground again, and check that the wheel rotates freely after you release the brake.
- **8.** Lower the front wheel on the ground again.

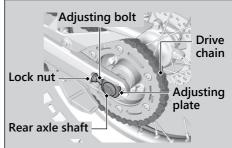
If a torque wrench was not used for installation, see your dealer as soon as possible to verify proper assembly. Improper assembly may lead to loss of braking capacity.

#### I Rear Wheel

#### Removal

- 1. Place your motorcycle on a firm, level surface
- 2. Support your motorcycle securely and raise the rear wheel off the ground using a maintenance stand or a hoist
- 3. Loosen the rear axle nut and lock nuts. and turn the adjusting bolts so the rear wheel can be moved all the way forward for maximum drive chain slack.
- 4. Remove the rear axle nut.
- 5. Remove the drive chain from the driven sprocket by pushing the rear wheel forward.
- 6. Remove the rear axle shaft and adjusting plates.





- **7.** Remove the brake caliper bracket, rear wheel and side collars.
  - Support the brake caliper assembly so that it doesn't hang from the brake hose. Do not twist the brake hose.
  - Avoid getting grease, oil, or dirt on the disc or pad surfaces.
  - ➤ Do not push the brake pedal while the wheel is removed.

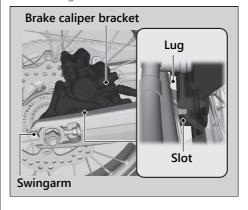
#### Installation

- **1.** To install the rear wheel, reverse the removal procedure.
  - Take care to prevent the brake caliper from scratching the wheel during installation.

#### NOTICE

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

**2.** Make sure that the slot on the brake caliper bracket is positioned in the lug on the swingarm.



- **3.** Adjust the drive chain. ▶ P. 70
- 4. Install and tighten the rear axle nut.

Torque: 88 N·m (9.0 kgf·m, 65 lbf·ft)

5. After installing the wheel, apply the brake

**5.** After installing the wheel, apply the brake pedal several times, then check if the wheel rotates freely. Recheck the wheel if the brake drags or if the wheel does not rotate freely.

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

#### **Electrical Trouble**

# **Battery Goes Dead**

Charge the battery using a motorcycle battery charger.

Remove the battery from the motorcycle before charging.

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

#### NOTICE

Jump starting using an automobile battery is not recommended, as this can damage your motorcycle's electrical system.

# **Burned-out Light Bulb**

Follow the procedure below to replace a burned-out light bulb.

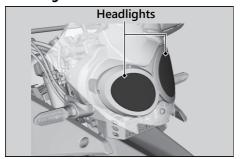
Turn the ignition switch to the  $\bigodot$  (Off) or  $\boxdot$  (Lock) position.

Allow the bulb to cool before replacing it. Do not use bulbs other than those specified. Check the replacement bulb for correct operation before riding.

For the light bulb wattage, see "Specifications." 

▶ P. 115

#### | Headlight



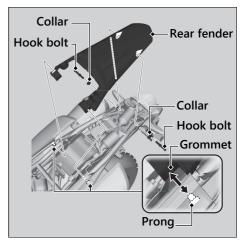
The headlights uses several LEDs.

If there is a LED which is not turned on, see your dealer for this servicing.

#### Electrical Trouble ► Burned-out Light Bulb

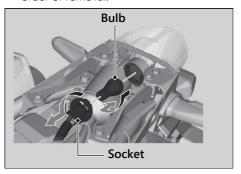
## | Brakelight/Taillight Bulb

- 1. Remove the seat. ▶ P. 56
- 2. Remove the hook bolts and collars.
- **3.** Remove the prongs from the grommets.
- 4. Remove the rear fender.

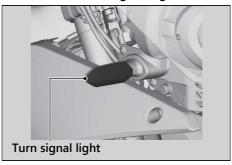


#### Electrical Trouble ▶ Burned-out Light Bulb

- **5.** Turn the socket counterclockwise, and remove it.
- **6.** Slightly press the bulb and turn it counterclockwise.
- **7.** Install a new bulb and parts in the reverse order of removal.



## | Front/Rear Turn Signal Light

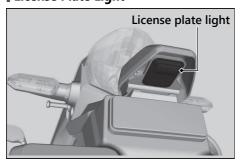


The front and rear turn signal lights use several LEDs.

If there is a LED which is not turned on, see your dealer for this servicing.

Electrical Trouble ► Burned-out Light Bulb

# | License Plate Light



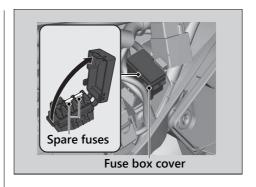
The license plate light use a LED. If there is a LED which is not turned on, see your dealer for this servicing.

#### **Blown Fuse**

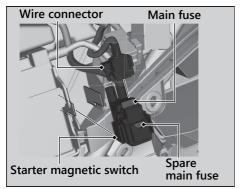
Before handling fuses, see "Inspecting and Replacing Fuses." 
▶ P. 46

#### I Fuse Box Fuses

- 1. Remove the left side cover. 
  ▶ P. 57
- 2. Open the fuse box cover.
- **3.** Pull the fuses out with the fuse puller in the tool kit one by one check for a blown fuse. Always replace a blown fuse with a spare of the same rating.
- 4. Close the fuse box cover.
- 5. Install the left side cover.

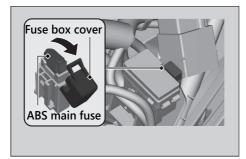


#### | Main Fuse



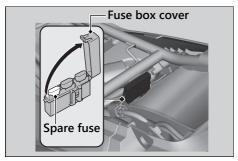
- 1. Remove the left side cover ▶ P 57
- 2. Pull the starter magnetic switch out.
- 3. Disconnect the wire connector of the starter magnetic switch.
- 4. Pull the main fuse out with the fuse puller in the tool kit and check for a blown fuse. Always replace a blown fuse with a spare of the same rating.
  - ► Spare main fuse is provided in the starter magnetic switch.
- 5. Reinstall parts in the reverse order of removal.

# ABS Fuse



- 1. Remove the left side cover. ▶ P. 57
- 2. Open the fuse box cover.
- **3.** Pull the ABS main fuse out 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.
  - ➤ Spare main fuse is provided in the fuse box. ► P. 96
- 4. Close the fuse box cover.
- 5. Reinstall the left side cover.

#### Other fuses



- 1. Remove the seat. ▶ P. 56
- 2. Open the fuse box cover.
- **3.** Pull the fuses out with the fuse puller in the tool kit one by one check for a blown fuse. Always replace a blown fuse with a spare fuse of the same rating.
- **4.** Close the fuse box cover.
- 5. Reinstall the seat.

#### NOTICE

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

# **Unstable Engine Operation Occurs Intermittently**

If the fuel pump filter is clogged, unstable engine operation will occur intermittently while riding.

Even if this symptom occurs, you can continue to ride your motorcycle.

If unstable engine operation occurs even if

sufficient fuel is available, have your motorcycle inspected by your dealer as soon as possible.

# Information

<eys< th=""><th>Ρ.</th><th>102</th></eys<>	Ρ.	102
nstruments, Controls, & Other Features	Ρ.	103
Caring for Your Motorcycle	Ρ.	104
Storing Your Motorcycle	Ρ.	107
Fransporting Your Motorcycle		
ou & the Environment		
Serial Numbers	Ρ.	110
Fuels Containing Alcohol	Ρ.	111
Catalytic Converter		
•		

Keys

# **Keys**

#### **Ignition Key**

Be sure to record the key number provided with the key number plate and record it in this manual. Store the spare key in a safe location. To make a duplicate, take the spare key or the key number to your dealer. If you lose all keys and the key number, 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

# 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 **O** (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 tripmeter A and B return to 0.0 when each read-out exceeds 9.999.9.

#### **Document Bag**

The owner's manual, registration, and insurance information can be stored in the plastic document bag located under the seat.

#### **Ignition Cut-off System**

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

#### Caring for Your Motorcycle

# **Caring for Your Motorcycle**

Frequent cleaning and polishing is important to ensure the life of your Honda. A clean motorcycle makes it easier to spot potential problems.

In particular, seawater and salts used to prevent ice on roads promote the formation of corrosion. Always wash your motorcycle thoroughly after riding on coastal or treated roads.

#### Washing

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

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

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

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

#### Caring for Your Motorcycle

#### 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
- Drv 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:
  - Any condensation inside the headlight should dissipate after a few minutes of running the engine.
- Do not use wax or polishing compounds on mat painted surface:
  - ► Use a soft cloth or sponge, plenty of water, and a mild detergent to clean mat painted surfaces. Dry with a soft clean cloth

#### **Aluminium Components**

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

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

Continued 105

## Caring for Your Motorcycle

## **Panels**

Follow these guidelines to prevent scratches and blemishes:

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

## Windscreen

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

#### NOTICE

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

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

Replace the windscreen if scratches cannot be removed and they obstruct clear vision. Take care to keep battery electrolyte, brake fluid, or other chemical solvents off the windscreen and screen garnish. They will damage the plastic.

## **Exhaust Pipe and Muffler**

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.

## Storing Your Motorcycle

## **Storing Your Motorcycle**

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

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

- Wash your motorcycle and wax all painted surfaces (except mat painted surfaces). Coat chrome pieces with rust-inhibiting oil.
- Lubricate the drive chain. 
  P. 49
- Place your motorcycle on a maintenance stand and position a block so that both tyres are off the ground.
- After rain, remove the body cover and allow the motorcycle to dry.
- Remove the battery ( P. 55) to prevent discharge. Charge the battery in a shaded, well-ventilated area.
  - ► If you leave the battery in place, disconnect the negative 

    terminal to prevent discharge.

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

**Transporting Your Motorcycle** 

# Transporting Your Motorcycle

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

#### NOTICE

Towing your motorcycle can cause serious damage to the transmission.

## You & the Environment

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

#### **Choose Sensible Cleaners**

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

## You & the Environment

## **Recycle Wastes**

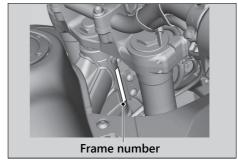
Put oil and other toxic wastes in approved containers and take them to a recycling centre. Call your local or state office of public works or environmental services to find a recycling centre in your area, and to get instructions on how to dispose of non-recyclable wastes. Do not place used engine oil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

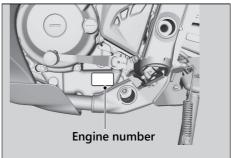
#### **Serial Numbers**

## **Serial Numbers**

The frame and engine serial numbers uniquely identify your motorcycle and are required in order to register your motorcycle. They may also be required when ordering replacement parts.

You should record these numbers and keep them in a safe place.





## **Fuels Containing Alcohol**

# **Fuels Containing Alcohol**

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

The following fuel blends can be used in your motorcycle:

- Ethanol (ethyl alcohol) up to 10% by volume.
- ► Petrol containing ethanol may be marketed under the name Gasohol. The use of petrol containing more than 10%

ethanol may:

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

#### NOTICE

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

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

## **Catalytic Converter**

# **Catalytic Converter**

This motorcycle 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 motorcycle's catalytic converters.

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

# **Specifications**

■ Main Components

iviain Components			
Overall length	2,210 mm (87.0 in)		
Overall width	900 mm (35.4 in)		
Overall height	1,425 mm (56.1 in)		
Wheelbase	1,455 mm (57.3 in)		
Minimum ground clearance	270 mm (10.6 in)		
Caster angle	28° 5′		
Trail	114 mm (4.5 in)		
Curb weight	ED, U type 157 kg (346 lb) KO type 155 kg (342 lb)		
Maximum weight capacity *1	159 kg (351 lb)		
Maximum luggage weight *2	4.5 kg (10 lb)		
Passenger capacity	Rider and 1 passenger		
Minimum turning radius	2.3 m (7.5 ft)		
Displacement	250 cm <sup>3</sup> (15.3 cu-in)		
Bore x stroke	76.0 x 55.0 mm (2.99 x 2.17 in)		
Compression ratio	10.7:1		
Fuel	Unleaded petrol Recommended: 91 RON or higher		
Fuel containing alcohol	ETHANOL up to 10 % by volume		
Tank capacity	10.1 L (2.67 US gal, 2.22 Imp gal)		

Battery	YTZ8V 12 V-7.0	Ah (10 HR) / 7.4 Ah (20 HR)
Gear ratio	1st	3.333
	2nd	2.117
	3rd	1.571
	4th	1.304
	5th	1.103
	6th	0.967
Reduction ratio (primary / final)	2.807 / 2	2.857

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

## Specifications

## **■** Service Data

T	Front	3.00-21 51P	
Tyre size	Rear	120/80-18M/C 62P	
Tyre type		Bias-ply, tube	
Recommended Tyre	Front	IRC GP-21F Z	
	Rear	IRC GP-22R	
	Normal	Not Permitted	
	Special	Not Permitted	
Tyre category of	Snow *2		
use *1	(DP on the	,	
	sidewall ma	arking)	
	Moped	Not Permitted	
Tyre air pressure	Front	150 kPa (1.50 kgf/cm², 22 psi)	
(Driver only)	Rear	150 kPa (1.50 kgf/cm <sup>2</sup> , 22 psi)	
Tyre air pressure	Front	150 kPa (1.50 kgf/cm², 22 psi)	
(Driver and passenger)	Rear	175 kPa (1.75 kgf/cm², 25 psi)	
Minimum tread	Front	3.0 mm (0.12 in)	
depth	Rear	3.0 mm (0.12 in)	
Spark plug	(standard)	SIMR8A9 (NGK)	
Spark plug gap	(non- adjustable)	0.8 - 0.9 mm (0.03 - 0.04 in)	
Idle speed	1,450 ± 100	rpm	

Recommended engine oil	Honda 4-stroke motorcycle oil API Service Classification SG or higher, excluding oils marked as "Energy Conserving" or "Resource Conserving" SAE 10W-30, JASO T 903 standard MA		
Engine oil capacity	After draining	1.4 L (1.5 US qt, 1.2 Imp qt)	
	After draining & filter change	1.5 L (1.6 US qt, 1.3 lmp qt)	
	After disassembly	1.8 L (1.9 US qt, 1.6 Imp qt)	
Recommended brake fluid	Honda DOT 3 or DOT 4 Brake Fluid		
Cooling system capacity	1.02 L (1.08 US qt, 0.90 Imp qt)		
Recommended coolant	Pro Honda HP Coolant		
Drive chain slack	40 - 50 mm (1.6 - 2.0 in)		
Recommended drive chain lubricant	Drive chain lubricant designed specifically for O-ring chains. If not available, use SAE 80 or 90 gear oil.		
Standard drive	DID 520VF		
chain	No. of links	106	

## Specifications

Standard sprocket	Drive sprocket	14T
size	Driven sprocket	40T

- \*1: Categorized by UNECE Regulation No. 75
  \*2: Snow is not limited as snow, but includes DP(Dual Purpose), M+S, MS, M&S (mud and snow).

## **■** Bulbs

Headlight	LED
Brakelight / Taillight	12 V-21 / 5 W
Front turn signal light / Position light	LED
Rear turn signal light	LED
License plate light	LED

#### **■** Fuses

Main fuse	30 A
Other fuse	30 A, 20 A, 10 A

## ■ Torque Specifications

= Torque opecinication	,,,,
Hook bolt	21 N·m (2.1 kgf·m, 15 lbf·ft)
Engine oil drain bolt	24 N·m (2.4 kgf·m, 18 lbf·ft)
Oil filter cover bolt	10 N·m (1.0 kgf·m, 7 lbf·ft)
Front axle shaft	69 N·m (7.0 kgf·m, 51 lbf·ft)
Front wheel axle pinch bolt	22 N·m (2.2 kgf·m, 16 lbf·ft)
Rear axle nut	88 N·m (9.0 kgf·m, 65 lbf·ft)
Drive chain adjusting lock nut	27 N·m (2.8 kgf·m, 20 lbf·ft)

ABS (Anti-lock Brake System)	Cooland Crankca Crash
В	D Drive C
<b>Battery</b> 45, 55	Drive C
Brakelight Switch 67	
Brakes	E
Fluid 48, 65, 114	Electric
Pad Wear 66	Engine
Braking 14	Idle S
Bulb	Numb
Brakelight/Taillight	Oil
Headlight93 License Plate Light95	Oil Fil Overl
Turn Signal Light	Startii
Turri signar Light	Stop
С	Stopp
Caring for Your Motorcycle 104	Will N
Clock	
Clutch	F
Freeplay76	Floode
Freeplay/6	Floode

Colour Label       4         Coolant       63         Crankcase Breather       7         Crash       5
Orive Chain
: lectrical Trouble92 Ingine
Idle Speed
Number
Oil Filter 6
Overheats 83
Starting 32
Stop Switch
Stopping
looded Engine 32

Frame Number 110	
Fuel	
Gauge 23	
Recommended	
Tank Capacity	
Fuel Indicator	
Fuses	
1 4363	
G	
Gasohol 111	
Н	
Hazard Switch28	
Headlight Aim 80	
Headlight Dimmer Switch 28	
Helmet Holder35	
High Beam Indicator27	
High Coolant Temperature Indicator 27, 83	
Horn Button	
20	
1	
Ignition Cut-off System	
Banking Sensor	
Ignition Key 102	

Ignition Switch       29, 103         Image Labels       7         Indicators       26         Instruments, Controls, & Other       103	
<b>K Keys</b> 102	
L       Labels       7         Load Limits       19         Loading Guidelines       19	
M         Maintenance       42         Fundamentals       42         Importance       38         Safety       38         Schedule       39         Maximum Weight Limit       19         Modifications       17	

N Neutral Indicator	5
O       Odometer       23, 103         Oil       Engine       47, 59         Overheating       83	9
P Parking	) 4 4
R Rear ABS (Anti-lock Brake System) OFF Indicator	9

Oil	47
Refuelling	
Removal	
Battery	5
Left Side Cover	
Seat	
Under Cowl	
Riding Precautions	13
S	
_	
Safety Guidelines	3
Safety Precautions	12
Serial Numbers	110
Shifting Gears	33
Side Stand	
Specifications	
Speedometer	
Start Button	
Starting the Engine	
Steering Lock	
Stopping Engine	
Stopping Engine	103

Storage       Equipment       35         Owner's Manual       36         Tool Kit       36         Storing       107         Switches       28
T         Tachometer       22         Throttle       78         Transporting       108         Tripmeter       23, 103         Troubleshooting       81         Turn Signal Indicators       27         Turn Signal Switch       28         Tyres
Air Pressure

ront Removal	87
lear Removal	89
lims & Spokes	74

20171214134357_42KZZA010_eng_BOOK Page 123 Thursday, December 14 2017 13:50:30 JST	