

Contents

Motorcycle Safety P. 2

Operation Guide P. 16

Maintenance P. 28

Troubleshooting P. 80

Information P. 92

Specifications P. 112

Index P. 116

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.

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

When service is required, remember that your Honda dealer knows your motorcycle best. If you have the required mechanical "know-how" and tools, you can purchase an official Honda Service Manual to help you perform many maintenance and repair tasks. ➔ [P.107](#)

Read the warranty information thoroughly so that you understand the warranty coverage and that you are aware of your rights and responsibilities. ➔ [P.108](#)

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

Canada www.honda.ca.

Happy riding!

[California Proposition 65 Warning](#)

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

A Few Words About Safety

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

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

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

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

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

DANGER

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

WARNING

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

CAUTION

You **CAN** be **HURT** if you don't follow instructions.

Other important information is provided under the following titles:

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

Motorcycle Safety

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


Safety Guidelines	P.3
Safety Labels	P.7
Safety Precautions	P.9
Riding Precautions	P.10
Accessories & Modifications	P.13
Loading	P.14

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.9

Before Riding

Make sure that you are physically fit, mentally focused and free of alcohol and drugs. Check that you and your passenger are both wearing an approved motorcycle helmet and protective apparel. Instruct your passenger on holding onto the grab rail 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.

Safety Guidelines

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

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

Developing off-road riding skill is a gradual step-by-step process. Start by practicing at low speeds in a safe area and slowly build your skills.

Ask your dealer if there are off-road riding groups in your area where you can learn from experienced riders. Also be sure to read Tips & Practice Guide for the Off-Highway Motorcyclist that came with your new motorcycle.

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 (➤P.14), and do not modify your motorcycle or install accessories that would make your motorcycle unsafe (➤P.13).

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 evaluate the condition of your motorcycle. If the engine is still running, turn it off. 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 colorless, odorless gas. Breathing carbon monoxide can cause loss of consciousness and may lead to death.

If you run the engine in a confined or even partly enclosed area, the air you breathe could contain a dangerous amount of carbon monoxide. Never run your motorcycle inside a garage or other enclosure.

WARNING

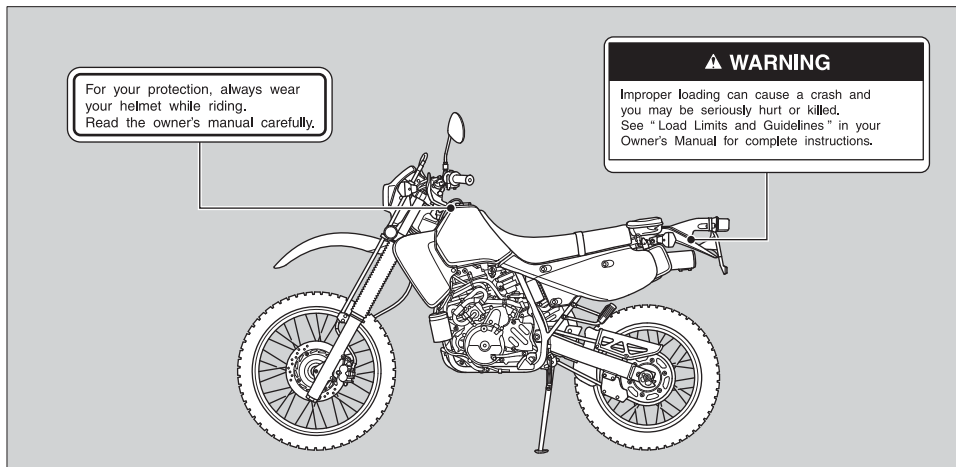
**Carbon monoxide gas is toxic.
Breathing it can cause
unconsciousness and even kill you.**

**Avoid any areas or activities that
expose you to carbon monoxide.**

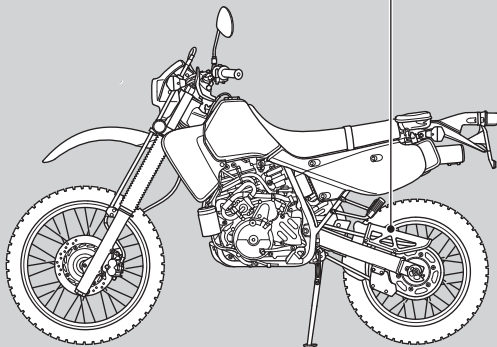
Safety Labels

Safety and information labels on your motorcycle provide important safety information and may warn you of potential

hazards that could cause serious injury. Read these labels carefully and don't remove them. If a label comes off or becomes hard to read, contact your dealer for a replacement.



TIRE INFORMATION			
Cold tire pressures :		Front	Rear
[Up to maximum weight capacity]			
	Front	150kPa	1.50kg/cm ² 22psi.
	Rear	150kPa	1.50kg/cm ² 22psi.
[Up to 90kg(200lbs) load]			
	Front	150kPa	1.50kg/cm ² 22psi.
	Rear	150kPa	1.50kg/cm ² 22psi.
Maximum weight capacity : 149kg(328lbs)			
Tire size : Front 3.00-21 51S			
Rear 4.60-18 63S			
Tire brand		Front	Rear
DUNLOP		K850	K850
BRIDGESTONE		TW-301	TW52
Min. recommend tire carrier tread depth:			
Front 3.0mm (0.12in)		Rear 3.0mm (0.12in)	
<i>Read owner's manual.</i>			



Safety Precautions

- Ride cautiously and keep your hands on the handlebars and feet on the footpegs.
- Keep passenger's hands on the seat band, passenger's feet on the footpegs while riding.
- Always consider the safety of your passenger, as well as other drivers and riders.

Protective Apparel

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

■ Helmet

Should be safety-standard certified, high-visibility, and correct size for your head.

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

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

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

WARNING

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

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

■ Gloves

Full-finger leather gloves with high abrasion resistance.

Riding Precautions

■ Boots or Riding Shoes

Sturdy boots with non-slip soles and ankle protection.

■ Jacket and Pants

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

■ 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 off-road 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 300 miles (500 km) of running, follow these guidelines to ensure your motorcycle's future reliability and performance.

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

Brakes

Observe the following guidelines:

- Avoid excessively hard braking and sudden shifting to a lower gear.
 - ▶ Sudden braking can reduce the motorcycle's stability.
 - ▶ Where possible, reduce speed before turning; otherwise you risk wheel slippage.
- Exercise caution on low traction surfaces.
 - ▶ The wheels lock more easily on such surfaces, and braking distances are longer.
- Avoid continuous braking.
 - ▶ Repeated braking can overheat the brakes, reducing their effectiveness.

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 paved 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 handlebars and remove the key when leaving the motorcycle unattended. Use of an anti-theft device is also recommended.

■ Parking with the Side Stand

1. Stop the engine.
2. Push the side stand down.
3. Slowly lean the motorcycle to the left until its weight rests on the side stand.

4. Turn the handlebars fully to the left.
 - ▶ Turning the handlebars to the right reduces stability and may cause the motorcycle to fall.
5. Turn the ignition switch to the LOCK position and remove the key. ➤ [P.21](#)

Refueling and Fuel Guidelines

Follow these guidelines to protect the engine:

- Use only unleaded gasoline.
- Use recommended octane number. Using lower octane gasoline will result in decreased engine performance.
- Do not use fuels containing a high concentration of alcohol. ➤ [P.106](#)
- Do not use stale or contaminated gasoline or an oil/gasoline mixture.
- Avoid getting dirt or water in the fuel tank.

Accessories & Modifications

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

WARNING

Improper accessories or modifications can cause a crash in which you can be seriously hurt or killed.

Follow all instructions in this owner's manual regarding accessories and modifications.

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

Loading

- Carrying extra weight affects your motorcycle's handling, braking and stability. Always ride at a safe speed for the load you are carrying.
- Avoid carrying an excessive load and keep within specified load limits.
➤ Maximum weight capacity / Maximum luggage weight P.112
- Tie all luggage securely, evenly balanced and close to the center of the motorcycle.
- Do not place objects near the lights or the muffler.

Also follow these guidelines when you ride off-road on rough terrain:

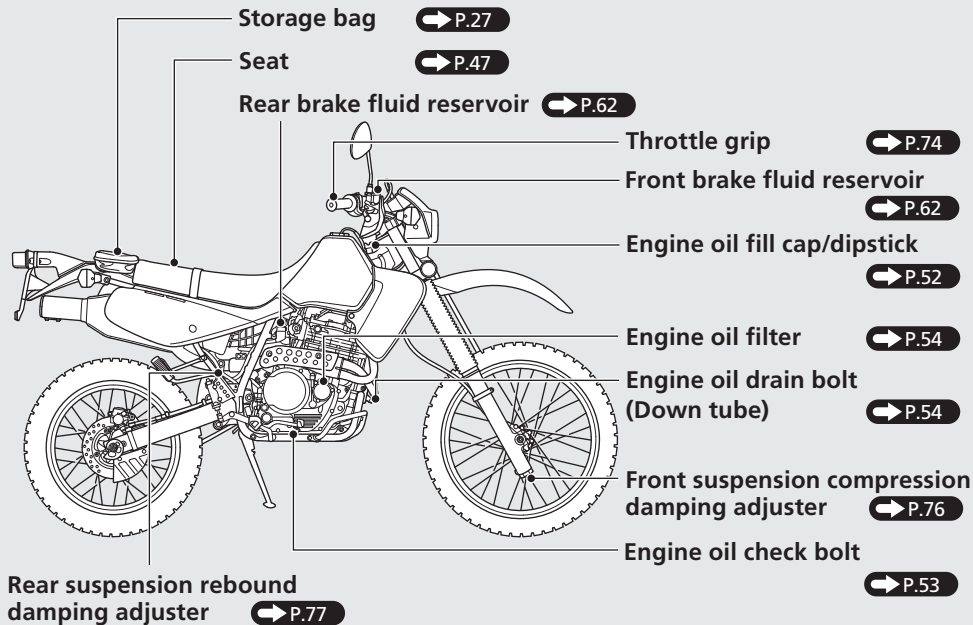
- Do not carry a passenger.
- Keep cargo small and light weight.
➤ Maximum luggage weight P.112
Make sure it cannot easily be caught on brush or other objects, and that it does not interfere with your ability to shift position to maintain balance and stability.

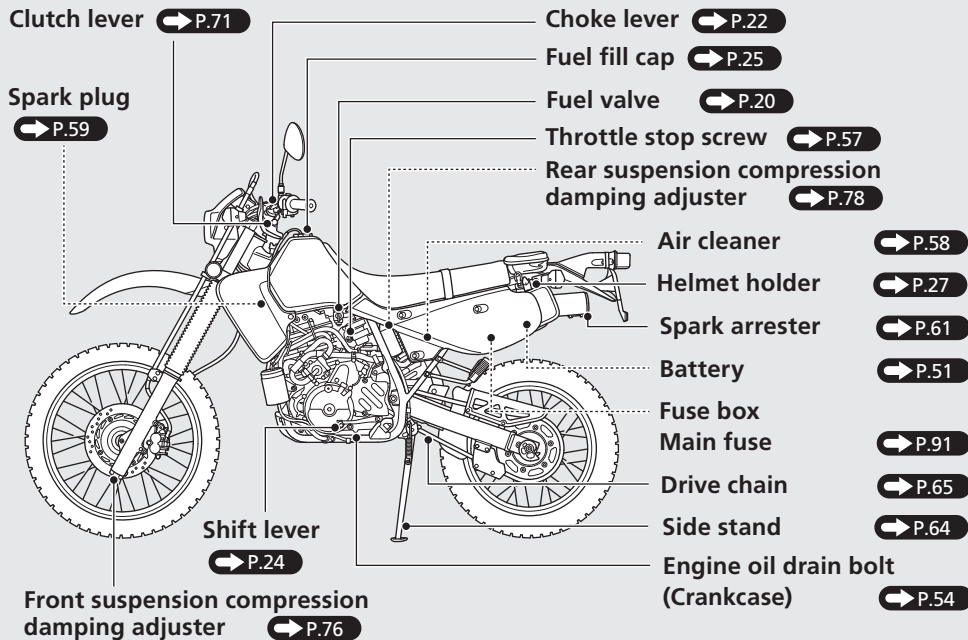
WARNING

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

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

Parts Location





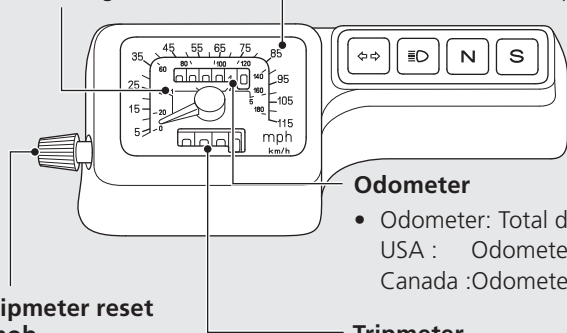
Instruments

Gear range indicator

Shows proper speed range for each gear.

Speedometer

- This shows your speed in miles (USA) or kilometers (Canada) per hour.



Tripmeter reset knob



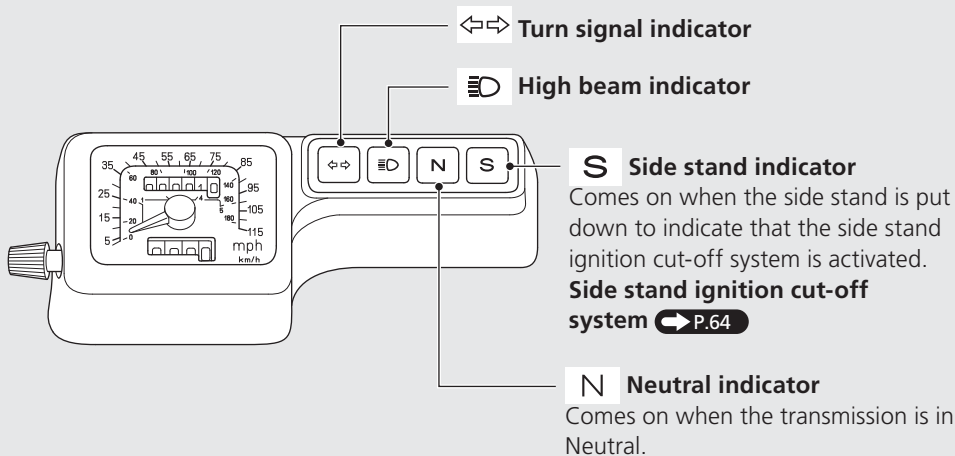
Odometer

- Odometer: Total distance ridden.
USA : Odometer & Tripmeter read in miles
Canada : Odometer & Tripmeter read in kilometers

Tripmeter

- Tripmeter: Distance ridden since you last reset the meter. (Turn the tripmeter reset knob as shown direction to reset to zero (0)).

Indicators





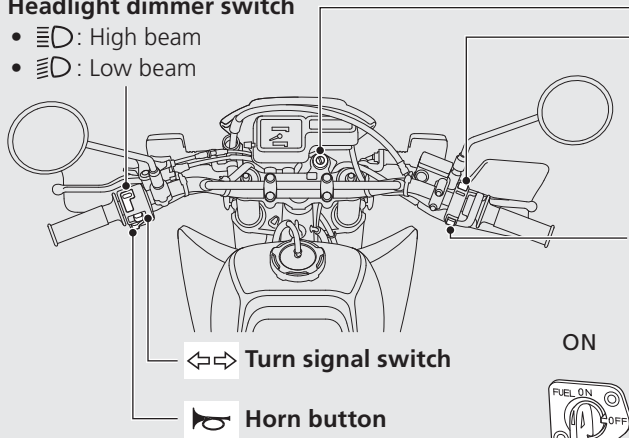
Lamp Check

When the ignition switch is turned ON, hi beam, neutral, and side stand indicators come on and remain on until you select the low beam, shift out of neutral, or raise the side stand. If one of these indicators does not come on when it should, have your dealer check for problems.


Switches


Headlight dimmer switch

-  D: High beam
-  D: Low beam



Engine stop switch

Should normally remain in the RUN  position.

- ▶ In an emergency, switch to the OFF  position to stop the engine.



Start button

Headlight turns off when operating the starter motor.



Turn signal switch

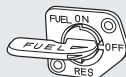
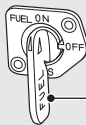


Horn button

ON

OFF

RES




Fuel valve

Fuel valve

The manual fuel valve is located on the left side under the fuel tank.

The three-way fuel valve is used to control the flow of fuel from the fuel tank to the carburetors.

ON - Normal position for riding. OFF - For parking, storing, or transportation

RES - For extra fuel to get to a gas station for refueling. **Refueling**  P.25

Ignition Switch

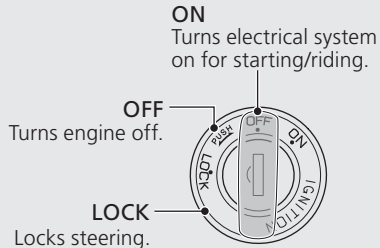
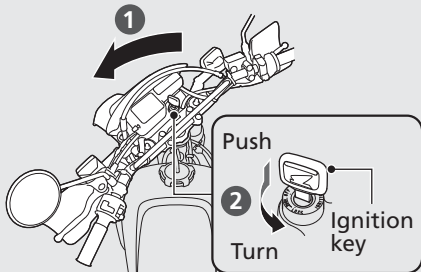
Switches the electrical system on/off, locks the steering.

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

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 handlebars all the way to the left.
- 2 Push the key down, and turn the ignition switch to the LOCK position.
 - ▶ Jiggle the handlebars if the lock is difficult to engage.
- 3 Remove the key.

Unlocking

Insert the key and turn the ignition switch to the OFF position.

Starting the Engine

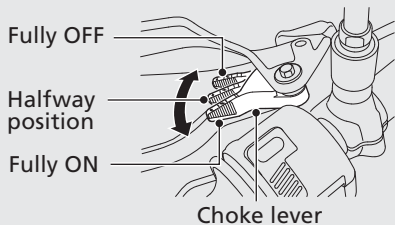
Start your engine using the following procedure, regardless of whether the engine is cold or warm.

NOTICE

- If the engine does not start within 5 seconds, turn the ignition OFF 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.
- Extended use of the choke may impair piston and cylinder wall lubrication and damage the engine.

Normal Air Temperature

10 ° - 35 °C (50 ° - 95 °F):

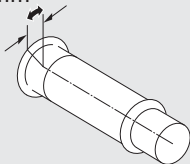


- 1 The fuel valve is ON.
- 2 Make sure the engine stop switch is in the RUN position.
- 3 Turn the ignition switch to the ON position.
- 4 Pull the choke lever back all the way to fully ON if the engine is cold.
- 5 Press the start button with the throttle completely closed.
 - ▶ Do not open the throttle when starting the engine with the choke on. This will lean the mixture, resulting in hard starting.
- 6 Immediately after the engine starts, push the choke lever forward to the halfway position.
- 7 About a half minute after the engine starts, push the choke lever forward all the way to fully OFF.
- 8 If idling is unstable, open the throttle slightly.

High Air Temperature 35 °C (95 °F) or above:

- ① Do not use the choke.
- ② With the throttle slightly open (about 3 mm), press the start button.

About 3mm



Low Air Temperature 10 °C (50 °F): or below

- ① Follow steps 1-5 under Normal Air Temperature.
- ② Warm up the engine by opening and closing the throttle slightly.
- ③ Continue warming up the engine until it runs smoothly and responds to the throttle when the choke lever is at fully OFF.

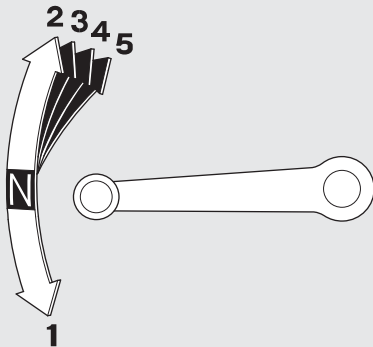
If the engine does not start:

- ① Press the engine stop switch to OFF.
- ② Push the choke lever forward all the way to fully OFF.
- ③ Open the throttle fully.
- ④ Press the start button for 5 seconds.
- ⑤ Wait 10 seconds, then press the engine stop switch to RUN.
- ⑥ Follow steps 1-2 under High Air Temperature.

If Engine Will Not Start → P.81

Shifting Gears

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



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

Recommended Shift Points

Shifting Up

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

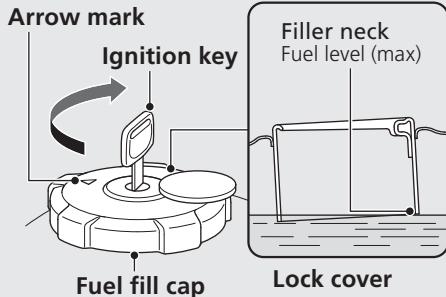
Shifting Down

From 5th to 4th	22 mph (35 km/h)
From 4th to 3rd	16 mph (25 km/h)

NOTICE

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

Refueling



Do not fill with fuel above the plate.

Fuel type: Unleaded gasoline only

Recommended fuel octane number:

Pump Octane Number (PON) 86 or higher.

Tank capacity: 2.77 US gal (10.5 liters)

Reserve capacity: 0.61 US gal (2.3 liters)

Refueling and Fuel Guidelines ➔ P.12

Opening the Fuel Fill Cap

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

Closing the Fuel Fill Cap

- 1 Install and tighten the fuel fill cap firmly by turning it clockwise until the arrow mark on the cap faces forward.
- 2 Turn the ignition key counterclockwise.
- 2 Remove the ignition key from the cap.

⚠️ WARNING

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

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

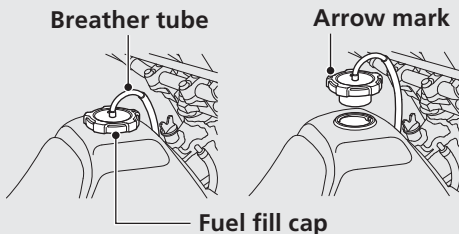
Refueling *(Continued)*

Fuel fill cap removal and installation for 50-state version (USA only)

50-state versions of this motorcycle are equipped with an evaporative emission control system. ➡ P.103

For the system to function properly, observe the following when removing and installing the fuel fill cap.

- 1 To open the fuel fill cap, turn the cap counterclockwise.
 - ▶ Do not disconnect the breather tube.

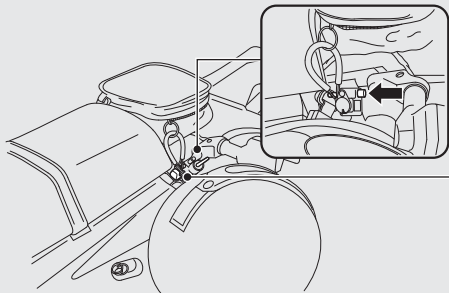


- 2 To close the cap, align the tabs of the fuel fill cap to the slots of the filler neck with the arrow mark on the cap towards the rear of the motorcycle.
- 3 Turn the cap clockwise until the arrow mark points towards the front.
 - ▶ Make sure that the breather tube is not twisted or blocked when the cap is secure in place.

NOTICE

If you replace the fuel fill cap, use only a Honda Genuine replacement parts or its equivalent. Failure to use the proper part could cause serious fuel system problems.

Storage Equipment



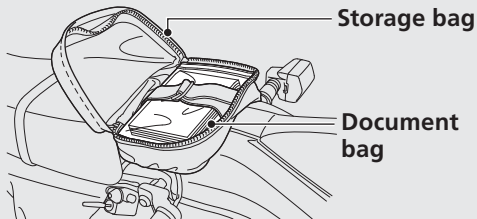
Helmet holder

The helmet holder is located under the seat.

► Use the helmet holder only when parked.

Document bag

The document bag is in the storage bag behind the rear seat.



⚠ WARNING

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

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

Maintenance

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

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

Importance of Maintenance	P.29	Spark Plug	P.59
Maintenance Schedule	P.31	Spark Arrester/Muffler	P.61
Maintenance Fundamentals	P.34	Brakes	P.62
Removing & Installing Body		Side Stand	P.64
Components	P.47	Drive Chain	P.65
Seat	P.47	Wheels	P.70
Left side cover	P.48	Clutch	P.71
Right side cover	P.49	Throttle	P.74
Shroud	P.50	Other Adjustments	P.75
Battery	P.51	Front Suspension	P.75
Engine Oil	P.52	Rear Suspension	P.77
Engine Idle Speed	P.57	Headlight Aim	P.79
Air Cleaner	P.58	Brakelight Switch	P.79

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.31](#)

WARNING

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

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

For information about the exhaust emission and noise emission requirements of the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Environment Canada (EC). ➔ [P.101](#)

USA

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

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.
- Park 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 for by your dealer. Retain all receipts. If you sell the motorcycle, these receipts should be transferred with the motorcycle to the new owner.

Maintenance Schedule

Items		Frequency	Odometer Reading *1							Refer to page		
			× 1,000 mi	0.6	4	8	12	16	20		24	
			× 1,000 km	1.0	6.4	12.8	19.2	25.6	32.0		38.4	
Emission-related Items	Fuel Line					I		I		I	–	
	Fuel Strainer Screen				C	C	C	C	C	C	–	
	Throttle Operation					I		I		I	74	
	Carburetor Choke					I		I		I	–	
	Air Cleaner *2						R			R	58	
	Spark Plug				I	R	I	R	I	R	59	
	Valve Clearance			I	I	I	I	I	I	I	–	
	Engine Oil			R	Initial = 600 mi (1,000 km) or 1 month: R Regular = Every 2,000 mi (3,200 km) or 6 months: R							52
	Engine Oil Filter			R		R		R		R	54	
	Engine Idle Speed			I	I	I	I	I	I	I	57	
	Secondary Air Supply System					I		I		I	–	
Evaporative Emission Control System *3						I			I	–		








Maintenance Level

 : Intermediate. We recommend service by your dealer, unless you have the necessary tools and are mechanically skilled. Procedures are provided in an official Honda Service Manual (▶ P. 107).

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

Maintenance Legend

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

Items		Frequency	Odometer Reading *1							Refer to page	
			× 1,000 mi	0.6	4	8	12	16	20		24
			× 1,000 km	1.0	6.4	12.8	19.2	25.6	32.0		38.4
Non-Emission-Related Items	Drive Chain *4		Every 500 mi (800 km): I L							65	
	Drive Chain Slider			I	I	I	I	I	I	68	
	Brake Fluid *5			I	I	R	I	I	R	62	
	Brake Pads Wear			I	I	I	I	I	I	63	
	Brake System		I		I		I		I	62	
	Brake Light Switch					I		I		I	79
	Headlight Aim					I		I		I	79
	Clutch System		I	I	I	I	I	I	I	71	
	Side Stand		I		I		I		I	64	
	Suspension					I		I		I	–
	Spark Arrester/Muffler				C	C	C	C	C	C	61
	Nuts, Bolts, Fasteners			I		I		I		I	–
	Wheels/Tires *4			I	I	I	I	I	I	I	44
Steering Head Bearings *4			I		I		I		I	–	

Notes:

- *1: At higher odometer readings, repeat at the frequency interval established here.
- *2: Service more frequently when riding in unusually wet or dusty areas.

*3: 50-state type only.

*4: Service more frequently when riding OFF-ROAD.

*5: Replace every 2 years, or at indicated odometer intervals, whichever comes first. 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 tire, can be a major inconvenience.

Check the following items before you get on your motorcycle:

- Fuel level-Fill fuel tank when necessary. ➔P.25
- Throttle-Check for smooth opening and full closing in all steering positions. ➔P.74
- Engine oil level-Add engine oil if necessary. Check for leaks. ➔P.52
- Drive chain-Check condition and slack, adjust and lubricate if necessary.
- Brakes-Check operation;
Front and Rear: check brake fluid level and pads wear. ➔P.62, 63

- Lights and horn-Check that lights, indicators and horn function properly.
- Engine stop switch-Check for proper function. ➔P.20
- Clutch-Check operation;
Adjust freeplay if necessary.
- Side stand ignition cut-off system-Check for proper function. ➔P.64
- Wheels and tires-Check condition, air pressure and adjust if necessary. ➔P.44

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

- Spokes and Rims-Make sure spokes are tight. Check the rims for any damage. ➔P.70
- Engine oil level-Add engine oil if necessary. Check for leaks. ➔P.52
- Fuel level-Add as much fuel as needed. Be sure the fuel fill cap is securely fastened. ➔P.25
- Drive chain-Check condition and slack, adjust and lubricate if necessary.
- Clutch-Check operation; Adjust freeplay if necessary
- Cables-Check for loose cables and other parts, and anything that appears abnormal.
- Nuts and Bolts-Use a wrench to check the tightness of all accessible nuts, bolts and fasteners.

Periodic Checks

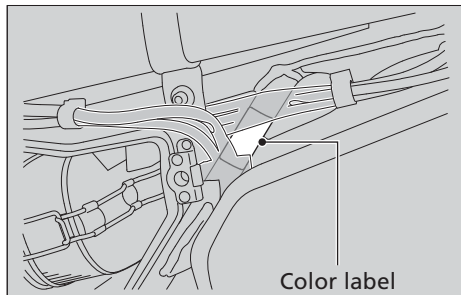
You should also perform other periodic maintenance checks at least once a month regardless of how often you ride, or more often if you ride frequently.

Also, check the odometer reading against the Maintenance Schedule and perform all maintenance that is due. ➤P.31

Tires and wheels	Check the air pressure (➤P.44), examine tread for wear and damage (➤P.44), and check the wheels for damage.
Fluid levels	Check the engine oil level (➤P.52), and brake fluid level (➤P.62).
Lights	Check that the headlight, brakelight, taillight and turn signals are working properly.
Controls	Check the freeplay of the clutch lever (➤P.71), throttle grip (➤P.74).
Drive chain	Check the slack (➤P.65), adjust the slack (➤P.66), and lubricate (➤P.43) as needed.
Fuses	Check that you have a full supply of spare fuses.
Nuts & bolts	Check the major nuts and bolts, and tighten as needed.

Replacing Parts

Always use Honda Genuine Parts or their equivalents to ensure reliability and safety. When ordering colored components, specify the model name, color, and code mentioned on the color label. The color label is attached to the frame behind the left side cover. ➡P.48



⚠ WARNING

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

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

Battery

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

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

What to do in an emergency

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

- Electrolyte splashes into your eyes:
 - ▶ Wash your eyes repeatedly with cool water for at least 15 minutes. Using water under pressure can damage your eyes.
- Electrolyte splashes onto your skin:
 - ▶ Remove affected clothing and wash your skin thoroughly using water.

- Electrolyte splashes into your mouth:
 - ▶ Rinse mouth thoroughly with water, and do not swallow.

WARNING

The battery gives off explosive hydrogen gas during normal operation.

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

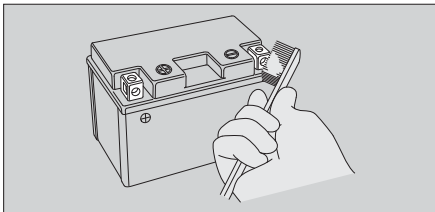
Wear protective clothing and a face shield, or have a skilled mechanic do the battery servicing.

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

Wash your hands after handling.

■ Cleaning the Battery Terminals

1. Remove the battery. ➤ P.51
2. If the terminals are starting to corrode and are coated with a white substance, wash with warm water and wipe clean.
3. If the terminals are heavily corroded, clean the terminals with a wire brush or sandpaper. Wear safety glasses.



4. After cleaning, reinstall the battery.

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

■ Charging

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

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

NOTICE

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

NOTICE

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

NOTICE

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

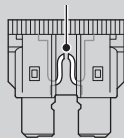
Fuses

Fuses protect the electrical circuits on your motorcycle. If something electrical on your motorcycle stops working, check for and replace any blown fuses. ➔ [P.91](#)

Inspecting and Replacing Fuses

Turn off the ignition switch to remove and inspect fuses. If a fuse is blown, replace with a fuse of the same rating. For fuse ratings, see "Specifications". ➔ [P.114](#)

Blown fuse



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.

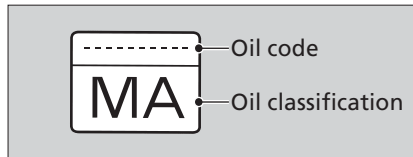
Selecting the Engine Oil

For recommended engine oil, see "Specifications". ➔P.113

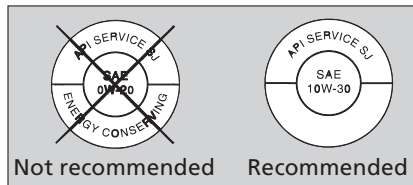
If you use non-Honda engine oil, check the label to make sure that the oil satisfies all of the following standards:

- 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" on the circular API service symbol.



Brake Fluid

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

NOTICE

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

Recommended brake fluid:

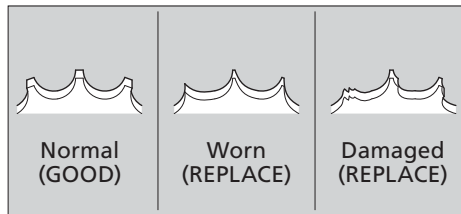
Honda DOT 4 Brake Fluid or equivalent

Drive Chain

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

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

Also inspect the engine sprocket and rear wheel sprocket. If either has worn or damaged teeth, have the sprocket replaced by your dealer.



NOTICE

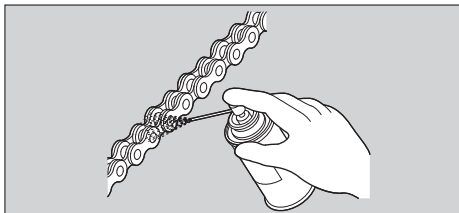
Use of a new chain with worn sprockets will cause rapid chain wear.

Cleaning and Lubricating

After inspecting the slack, clean the chain and sprockets while rotating the rear wheel. Use 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. If not available, use SAE 80 or 90 gear oil.

Recommended lubricant:

Pro Honda HP Chain Lube



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

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

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.

Tires (Inspecting/Replacing)

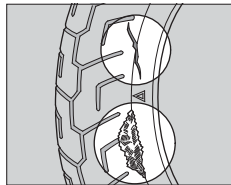
Checking the Air Pressure

Visually inspect your tires 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 tires look low. Always check air pressure when your tires are cold.

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

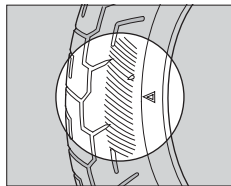
Inspecting for Damage

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



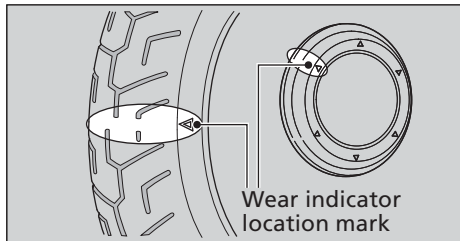
Inspecting for Abnormal Wear

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



Inspecting Tread Depth

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



!WARNING

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

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

Maintenance Fundamentals

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

➔ [P.113](#)

Follow these guidelines whenever you replace tires.

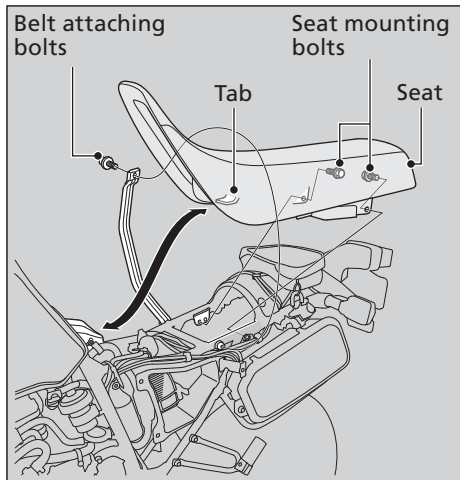
- Use the recommended tires or equivalents of the same size, construction, speed rating, and load range.

WARNING

Installing improper tires 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 tires recommended in this owner's manual.

Seat



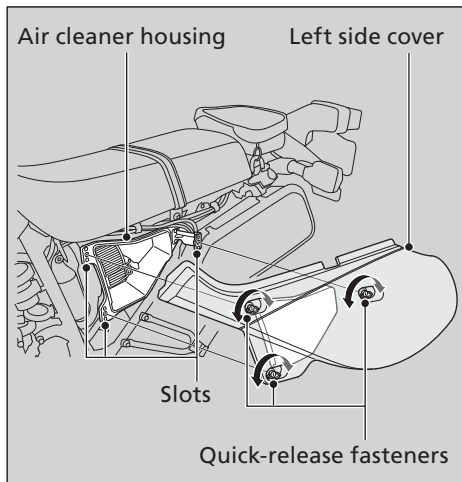
Removal

1. Remove both side covers. ➤ [P.48,49](#)
2. Remove the belt attaching bolt.
3. Remove the seat mounting bolts.
4. Pull the seat backward.

Installation

1. Insert the tab into the recess under the frame.
2. Tighten the seat mounting bolts securely.
3. Fasten the belt over the seat and tighten the belt attaching bolt securely.
4. Install both side covers.

Left side cover



The left side cover must be removed for seat removal, or to service the air cleaner, fuse or battery maintenance.

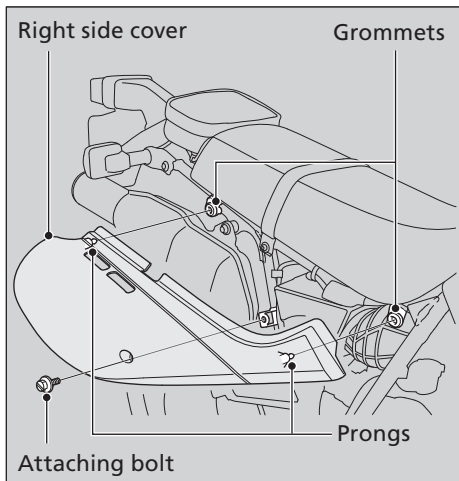
Removal

1. Lift the D-ring on each quick-release fastener and turn it counterclockwise until it releases.
2. Remove the left side cover.

Installation

1. Align the left side cover with the air cleaner housing.
2. Push each quick-release fastener into its slot, lift its D-ring, and turn it clockwise until it is secure.

Right side cover



The Right side cover must be removed for seat removal.

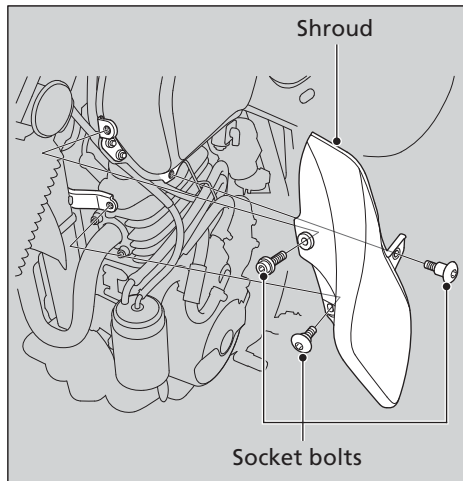
■ Removal

1. Remove the attaching bolt.
2. Pull the right side cover out.

■ Installation

1. Position the right side cover so the prongs are aligned with the frame grommets.
2. Push both prongs in.
3. Install the attaching bolt and tighten it.

Shroud



The shroud must be removed for access to the spark plug.

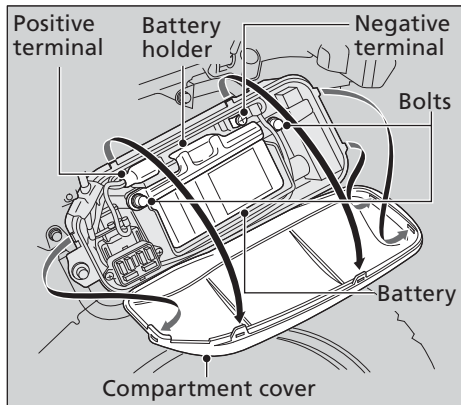
■ Removal

1. Remove the socket bolts.
2. Remove the shroud.

■ Installation

Install the parts in the reverse order of removal.

Battery



Removal

Make sure the ignition switch is OFF.

1. Remove the left side cover. ➤ [P.48](#)

2. Open the battery compartment cover.
3. Disconnect the negative \ominus terminal lead from the battery first.
4. Disconnect the positive \oplus terminal lead from the battery.
5. Remove the bolts and remove the battery holder.
6. Remove the battery taking care not to drop the terminal nuts.

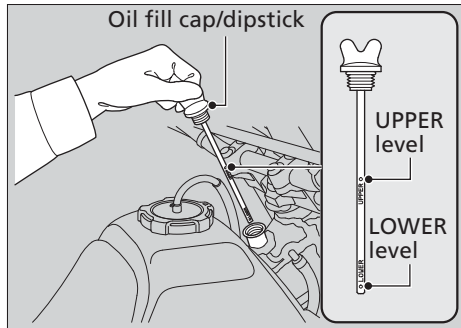
Installation

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

For proper handling of the battery, see "Maintenance Fundamentals". ➤ [P.38](#)
 Battery Goes Dead. ➤ [P.88](#)

Checking the Engine Oil

1. If the engine is cold, idle the engine for 3 to 5 minutes.
2. Turn the ignition switch OFF, stop the engine and wait 2 to 3 minutes.
3. Remove the oil fill cap/dipstick and wipe it clean.
4. Place your motorcycle in an upright position on a firm, level surface.
5. Insert the oil fill cap/dipstick until it seats, but don't screw it in.
Check that the oil level is between the UPPER and LOWER level marks in the oil fill cap/dipstick.
6. Securely install the oil fill cap/dipstick.



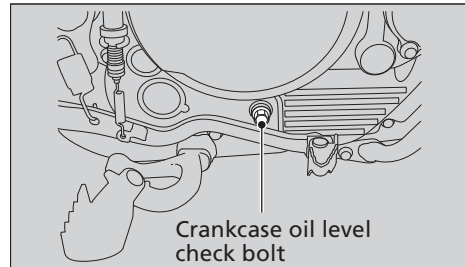
Adding Engine Oil

If the engine oil is below or near the lower level mark, add the recommended engine oil. ➤ [P.41](#)

1. Remove the oil fill cap/dipstick. 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/dipstick.

The engine contains a crankcase oil level check bolt. Remove the bolt and check that the level is flush with the lower edge of the hole.

If it is, install and tighten the bolt, start the engine and check the engine oil level. If the crankcase oil level is low, add the recommended engine oil before starting the engine to check the engine oil level.



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.38](#)

Changing Engine Oil & Filter

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

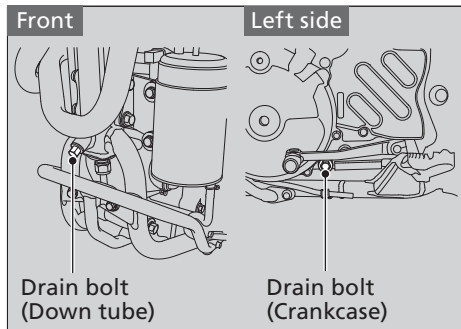
Use a new Honda Genuine oil filter or equivalent specified for your model.

NOTICE

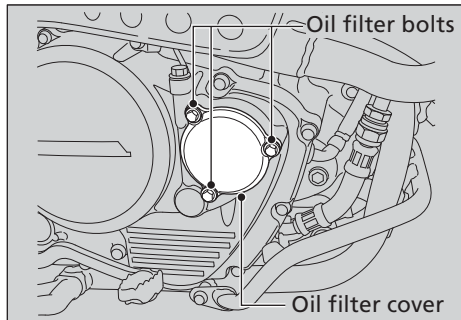
Using the wrong oil filter can result in serious damage to the engine.

1. If the engine is cold, idle the engine for 3 to 5 minutes.
2. Turn the ignition switch OFF, stop the engine and wait for 2 to 3 minutes.
3. Park on a firm, level surface and lower the side stand.
4. Place a drain pan under the drain bolt.

5. Remove the oil fill cap/dipstick, drain bolt on the down tube, and the drain bolt on the left left crankcase to drain the oil.

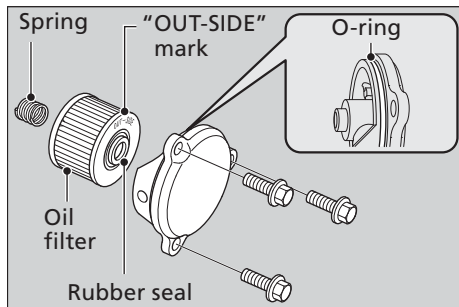


6. Remove the oil filter cover, oil filter and spring by removing the oil filter cover bolts and let the remaining oil drain out.
 - Discard the oil and oil filter at an approved recycling center.



7. Check that the oil filter cover O-ring is in good condition.

8. Position the spring against the engine crankcase and install the new oil filter with the "OUT-SIDE" mark facing out.



9. Install the oil filter cover by tightening the oil filter cover bolts.

Torque: 9 lbf-ft (12 N·m, 1.2 kgf·m)

- 10.** Check the condition of the sealing washer. on the drain bolt.
- ▶ Replace the washer every other time the oil is changed.
- 11.** Install the drain bolt and tighten.

Crankcase

Torque: 18 lbf·ft (24 N·m, 2.4 kgf·m)

Down tube

Torque: 29 lbf·ft (39 N·m, 4.0 kgf·m)

- 12.** Fill the oil tank with the recommended oil. (▶P.41)

Required oil

When changing oil & engine oil filter:

2.06 US qt (1.95 liters)

When changing oil only:

2.0 US qt (1.9 liters)

- ▶ To fill the oil tank to the upper level, oil should be add two steps

- 13.** Pour the recommended oil into the oil tank, up to the UPPER level mark.
- 14.** Install the oil fill cap/dipstick securely.
- 15.** Start the engine. Let it idle 5 minutes. During idling, support your motorcycle in an upright position on a firm, level surface to assure an accurate oil level reading.
- 16.** Stop the engine. Remove the oil fill cap/ dipstick.
- 17.** Add the recommended oil up to the UPPER level mark. (Do not overfill.)
- 16.** Reinstall the oil fill cap/dipstick.

NOTICE

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

Adjusting the Engine Idle Speed

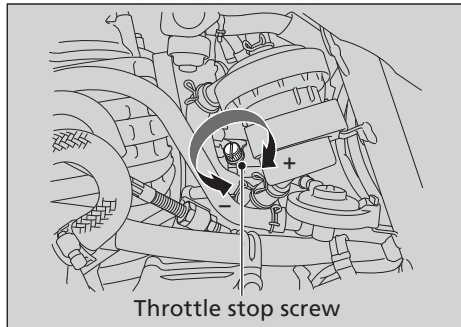
The best way to assure proper carburetion is to see your dealer for regularly scheduled servicing, including carburetor adjustment. Remember, idle speed adjustment is not a “cure-all” for other problems in your engine’s fuel-delivery system. Adjusting the idle will not compensate for a fault elsewhere.

For information about high altitude carburetor adjustment. ➔ [P.105](#)

The engine must be at normal operating temperature for accurate idle speed adjustment. 10 minutes of stop-and-go riding is sufficient.

1. Warm up the engine, place the motorcycle on its side stand.
2. Adjust idle speed with the throttle stop screw.

Idle speed: 1300 ± 100 rpm



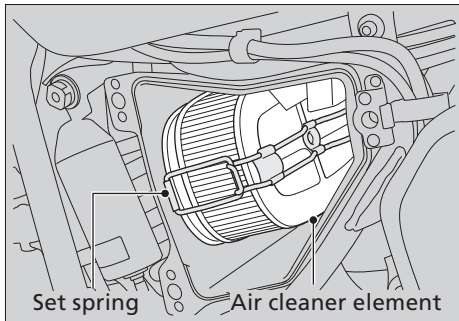
Changing Air Cleaner Element

Use a new Honda Genuine air cleaner element or an equivalent specified for your motorcycle.

NOTICE

Using the wrong air cleaner element may cause premature engine wear or performance problems.

1. Remove the left side cover. ➤ [P.48](#)
2. Remove the air cleaner element by releasing the set spring.
3. Install the new air cleaner element.
 - ▶ Make sure the air cleaner element is installed securely.
4. Install the left side cover.



Checking Spark Plug

For the recommended spark plug, see “Specifications.” ➤ [P.113](#)

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

NOTICE

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

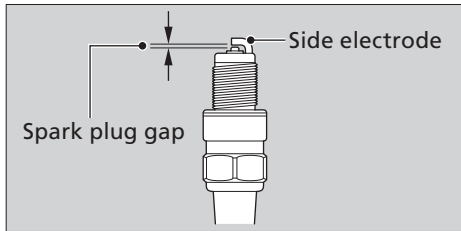
1. Remove the shroud. ➤ [P.50](#)
2. Disconnect the spark plug cap.
 - ▶ Take care to avoid damaging the spark plug wire when disconnecting the cap.
3. Clean any dirt from around the spark plug base.
4. Remove the spark plug using the spark plug wrench.

5. Inspect the electrodes and centre porcelain for deposits, erosion or carbon fouling.
 - ▶ If the erosion or deposit is heavy, replace the plug
 - ▶ Clean a carbon or wet-fouled plug with a plug cleaner, otherwise use a wire brush.
6. Check the spark plug gap using a wire-type feeler gauge.
 - ▶ If adjustment is necessary, bend the side electrode carefully.

The gap should be:

0.031 to 0.035 in (0.80 to 0.90 mm)

Spark plug ► Checking Spark Plug



7. Make sure the plug washer is in good condition.
8. With the plug washer attached, thread the spark plug in by hand to prevent cross-threading.
9. Tighten the spark plug:
 - If the old plug is good:
 - 1/8 turn after it seats
 - If installing a new plug, tighten it twice to prevent loosening:
 - a) First, tighten the plug:
 - NGK: 3/4 turn after it seats.
 - DENSO: 1/2 turn after it seats.

- b) Then loosen the plug.
- c) Next, tighten the plug again:
 - 1/8 turn after it seats.

NOTICE

Improperly tightened spark plugs can damage the engine. If a plug is too loose, a piston may be damaged. If a plug is too tight, the threads may be damaged.

10. Reinstall the spark plug cap. Take care avoid pinching any cables or wires.
11. Install the parts in the reverse order of removal.

Cleaning the Spark Arrester/ muffler

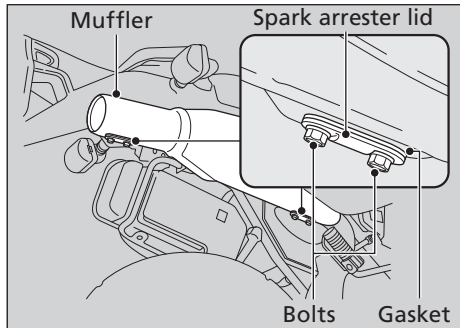
Regular servicing prevents carbon buildup (which can diminish engine performance) and also complies with USDA regulations for regular maintenance to assure proper function. The spark arrester prevents random sparks from the combustion process in your engine from reaching the environment.

The use of safety glasses is recommended for this procedure.

Because of the possible fire hazard, check that there are no combustible materials in the area before purging the spark arrester.

1. Remove the bolts, spark arrester lid, and gasket from the spark arrester and muffler.
2. Start the engine.

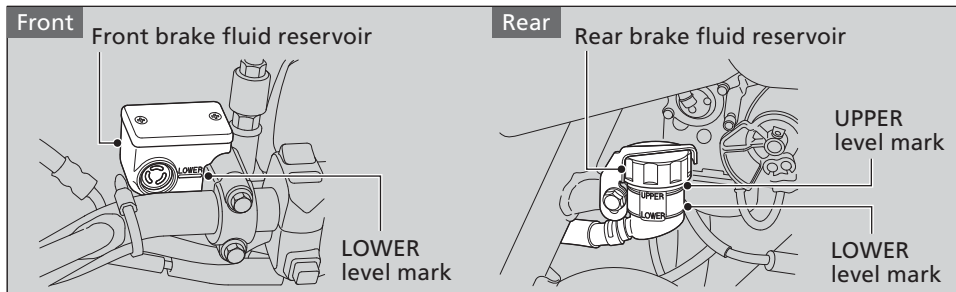
3. Block the end of the muffler with a shop towel to create exhaust system back pressure and rev up the engine about 20 times.
4. After cleaning the spark arrester and muffler carbon, stop the engine, allow the exhaust system to cool off, and reinstall the removed parts.



Checking Brake Fluid

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



Inspecting the Brake Pads

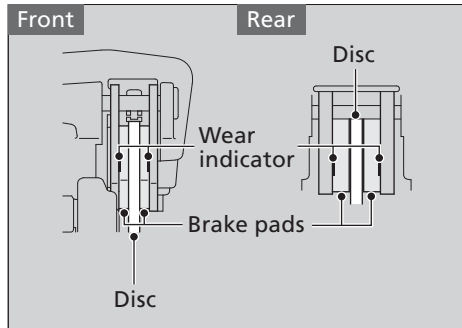
Check the condition of the brake pad groove wear indicators.

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

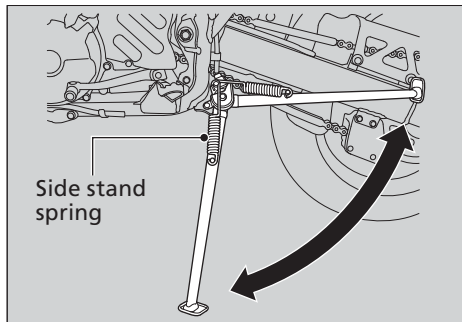
1. **Front** Inspect the brake pads from below the brake caliper.
2. **Rear** Inspect the brake pads from the rear right of the motorcycle.

If necessary have the pads replaced by your dealer.

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



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.

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.

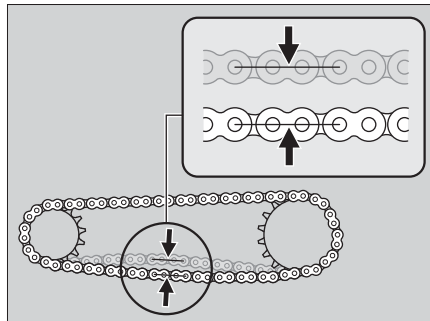
Have the chain inspected by your dealer.

1. Place your motorcycle on the side stand on a level surface.
2. Stop the engine place the gear in Neutral.
3. Check the slack in the lower half of the drive chain midway between the sprockets.

Drive chain slack:

1 3/8 to 1 3/4 in (35 to 45 mm)

- Do not ride your motorcycle if the slack exceeds 2 3/8 in (60 mm).



4. Roll the motorcycle forward and check that the chain moves smoothly.
5. Inspect the sprockets. ➤ [P.42](#)
6. Clean and lubricate the drive chain. ➤ [P.43](#)

Adjusting the Drive Chain Slack

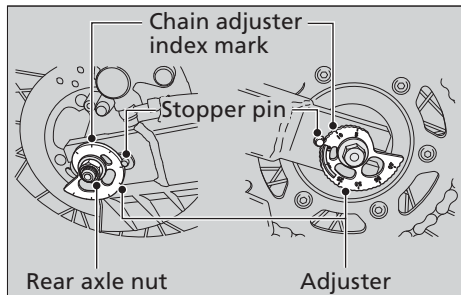
Adjusting the chain requires special tools. Have the drive chain slack adjusted by your dealer.

1. Place your motorcycle on the side stand on a level surface.
2. Stop the engine. Place the transmission in Neutral.
3. Loosen the rear axle nut.
4. Turn both adjusters an equal number of turns until the correct drive chain slack is obtained.

Adjust the slack at a point midway between the front sprocket and the rear wheel sprocket.

Check the drive chain slack. ➤ [P.65](#)

5. Check rear axle alignment by making sure the chain adjuster index marks align with the stopper pins on both side of the swingarm. Both marks should correspond. If the axle is misaligned, turn the right or left adjusters until the marks are aligned and recheck chain slack.



6. Tighten the rear axle nut.

Torque: 65 lbf-ft (88 N·m, 9.0 kgf·m)

7. Recheck drive chain slack.

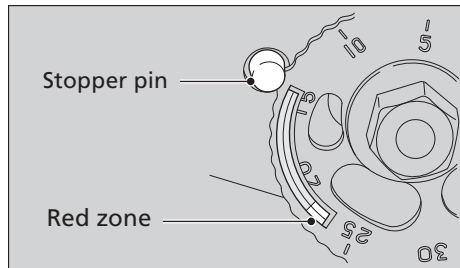
If a torque wrench was not used for installation, see your dealer as soon as possible to verify proper assembly. Improper assembly may lead to loss of braking capacity.

Checking the Drive Chain Wear

Check the chain wear label when adjusting the drive chain. If the stopper pin on the swingarm 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: RK 520MOZ6 or DID 520V8

If necessary have the drive chain replaced by your dealer.

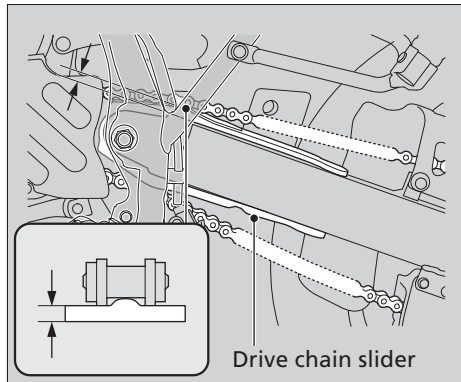


Checking the Drive Chain Slider/ Slipper/Guide Slider

Check the condition of the drive chain slider. The drive chain slider need to be replaced if it is worn to the wear limit.

Chain slider thickness limit:
0.16 in (4.0 mm)

If necessary have the drive chain slider replaced by your dealer.



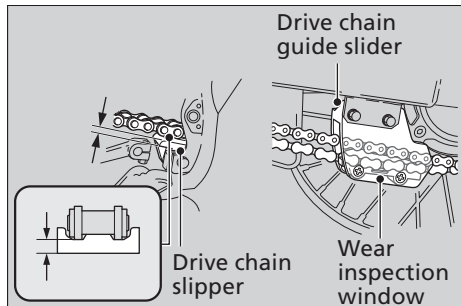
Check the condition of the drive chain slipper and drive chain guide slider. The drive chain slipper need to be replaced if it is worn to the wear limit.

Chain slipper thickness limit:

0.08 in (2.0 mm)

The drive chain guide slider need to be replaced if the chain is visible through the wear inspection window.

If necessary have the drive chain slipper and drive chain guide slider replaced by your dealer.



Wheels Rims & Spokes

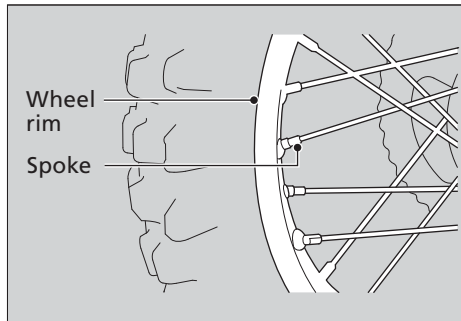
Keeping the wheels true (round) and maintaining correct spoke tension is critical to safe motorcycle operation.

During the first 600 miles (1,000 km), spokes will loosen more rapidly due to the initial seating of the parts. 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. ➔ [P.82](#)

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.



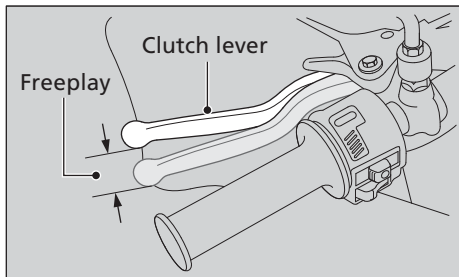
Checking the Clutch

Checking the Clutch Lever Freeplay

Check the clutch lever freeplay.

Freeplay at the clutch lever:

$\frac{3}{8}$ to $\frac{13}{16}$ in (10 to 20 mm)



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

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

NOTICE

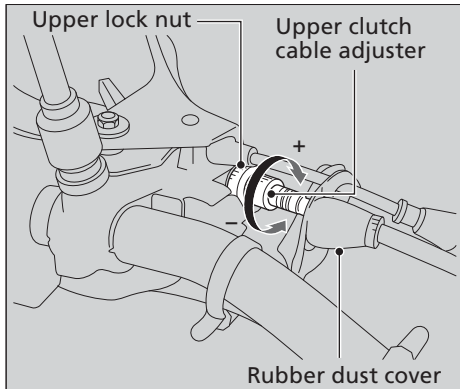
Improper freeplay adjustment can cause premature clutch wear.

Adjusting the Clutch Lever Freeplay

Upper Adjustment

Attempt adjustment with the upper clutch cable adjuster first.

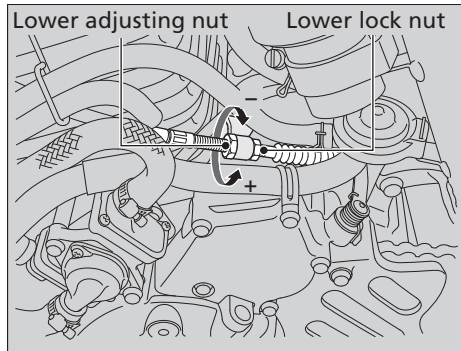
1. Pull back the rubber dust cover.
2. Loosen the upper lock nut.
3. Turn the upper clutch cable adjuster until the freeplay is $\frac{3}{8}$ to $\frac{13}{16}$ in (10 to 20 mm).
4. Tighten the upper lock nut and check the freeplay again.
5. Install the rubber dust cover.



Lower Adjustment

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

1. Loosen the upper lock nut and turn the upper clutch cable adjuster all the way in (to provide maximum freeplay). Tighten the upper lock nut.
2. Loosen the lower lock nut.
3. Turn the lower adjusting nut until the clutch lever freeplay is $\frac{3}{8}$ to $\frac{13}{16}$ in (10 to 20 mm).
4. Tighten the lower lock nut and check the clutch lever freeplay.
5. Start the engine, pull the clutch lever in, and shift into gear. Make sure the engine does not stall and the motorcycle does not creep. Gradually release the clutch lever and open the throttle. Your motorcycle should move smoothly and accelerate gradually.

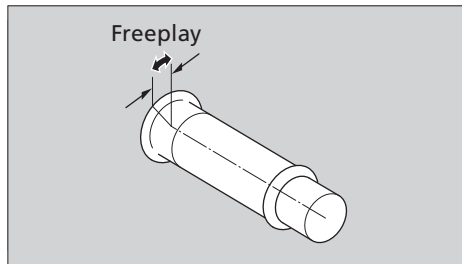


If proper adjustment cannot be obtained or the clutch does not work correctly, see your dealer.

Checking the Throttle

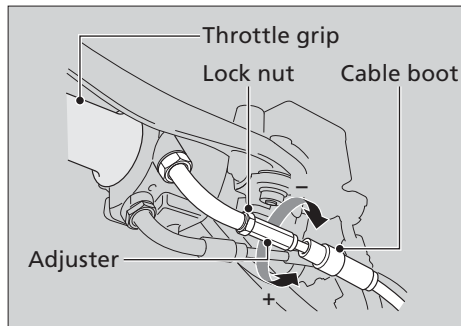
With the engine off, check that the throttle rotates smoothly from fully closed to fully open in all steering positions and throttle freeplay is correct. If the throttle does not move smoothly, close automatically, or if the cable is damaged, have the motorcycle inspected by your dealer.

Freeplay at the throttle grip flange:
1/16 to 1/4 in (2 to 6 mm)



Adjusting the Throttle Freeplay

1. Slide the cable boot.
2. Loosen the lock nut.
3. Turn the adjuster until the freeplay is 1/16 to 1/4 in (2 to 6 mm).
4. Tighten the lock nut, return the cable boot, and inspect the throttle action again.



Adjusting the Front Suspension

Air Pressure

You can adjust the air pressure to suit the load or load surface. For accurate pressure readings, check and adjust air pressure before riding (when the fork tubes are cold), with the front wheel off the ground.

1. Raise the front wheel off the ground by a support block under the engine.
2. Remove the air valve caps.
Check the air pressure using the pressure gauge.

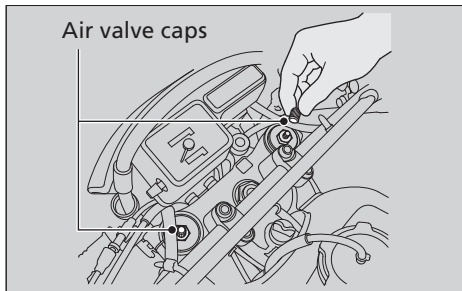
Standard air pressure:

0 psi (0 kPa, 0 kgf-cm²)

Maximum air pressure:

6 psi (40 kPa, 0.4 kgf-cm²)

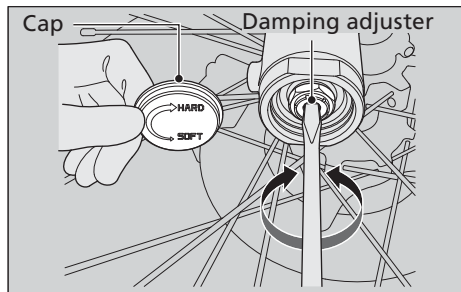
3. If air pressure is insufficient, add air with a bicycle air pump. Do not exceed the maximum recommended air pressure. To decrease air pressure, depress the valve core.
Some pressure will be lost when using the gauge. Determine the amount of loss and compensate accordingly. Also, be sure that the air pressure in both fork tubes is equal.
▶ Do not add a lot of air pressure at one time. Fork action becomes very stiff if more than the recommended pressure is used.
4. Install the air valve caps.



Compression Damping

You can adjust the compression damping by the adjuster to suit the load or the road surface. The compression damping adjuster has at least 14 positions (clicks). Turning the adjuster screw one full turn advances the adjuster 4 positions.

Turn clockwise to increase compression damping (hard), or turn counterclockwise to decrease compression damping (soft). The standard position is approximately 3 clicks from the maximum setting.



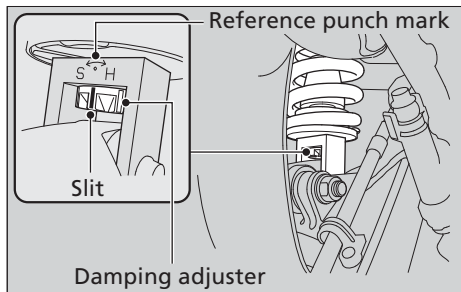
NOTICE

Do not turn the adjuster beyond the limits. Adjust both left and right forks to the same air pressure and compression damping.

Adjusting the Rear Suspension

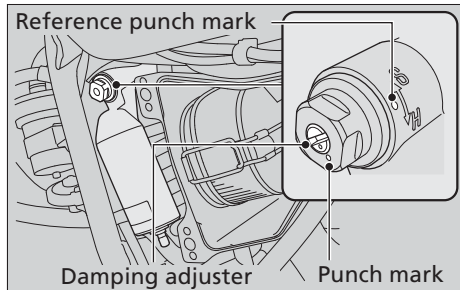
Rebound Damping

You can adjust the rebound damping by the adjuster to suit the load or the road surface. The rebound damping adjuster has at least 19 positions (clicks). Turning the adjuster one full turn advances the adjuster 8 positions. Turn clockwise to increase rebound damping (hard), or turn counterclockwise to decrease rebound damping (soft). The standard position is approximately 13-17 clicks from the maximum setting so that the slit on the adjuster aligns with the reference punch mark.



Compression Damping

You can adjust the compression damping by the adjuster to suit the load or the road surface. The compression damping adjuster has at least 20 positions. Turning the adjuster one full turn advances the adjuster 8 positions. Turn clockwise to increase compression damping (hard), or turn counterclockwise to decrease compression damping (soft). The standard position is approximately 7-11 positions from the maximum setting so that the punch mark on the adjuster aligns with the reference punch mark.



NOTICE

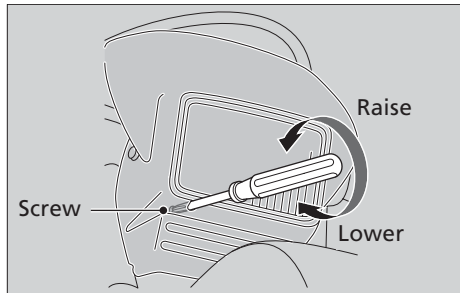
Do not turn the adjuster beyond the limits.

NOTICE

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

Adjusting the Headlight Aim

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



Adjusting the Brakelight Switch


Check the operation of the brakelight switch. 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.

Troubleshooting

Engine Will Not Start	P.81
Tire Puncture	P.82
Electrical Trouble	P.88
Battery Goes Dead.....	P.88
Burned-out Light Bulb.....	P.88
Blown Fuse.....	P.91

Starter Motor Operates But Engine Does Not Start

Check the following items:

- Make sure engine stop switch is RUN  position. ➔ [P.20](#)
- Check the correct engine starting sequence. ➔ [P.22](#)
- Check that there is gasoline in the fuel tank.

Starter Motor Does Not Operate

Check the following items:

- Check for a blown fuse. ➔ [P.91](#)
- Check for a loose battery connection or battery terminal corrosion. ➔ [P.38](#)
- Check the condition of the battery. ➔ [P.88](#)

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

Tire Puncture

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

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. Any time a tube is replaced, the tire should be carefully inspected as described.

WARNING

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

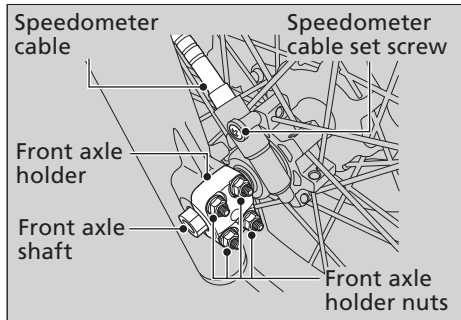
Removing Wheels

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

Front Wheel

Removal

1. Park on a firm, level surface.
2. Support your motorcycle securely and raise the front wheel off the ground using a maintenance stand or a hoist.
3. Remove the speedometer cable set screw and disconnect the speedometer cable.
4. Remove the front axle holder nuts and the front axle holder.
5. Remove the front axle shaft and front 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.



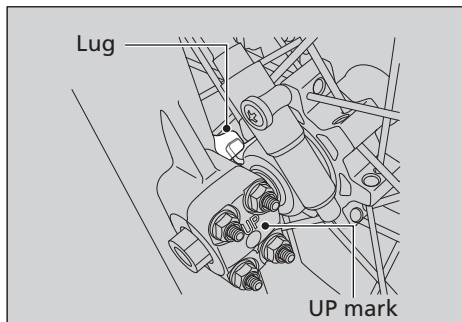
Installation

1. Position the wheel between the fork legs and insert the front axle shaft from the right side, through the wheel hub and left fork leg.

NOTICE

When installing the wheel, carefully fit the brake disc between the pads to avoid scratching them.

2. Position the lug on the speedometer gearbox against the lug on the right fork leg.



3. Tighten the front axle shaft.

Torque: 63 lbf·ft (85 N·m, 8.7 kgf·m)

4. Install the axle holder with the UP mark upward and first tighten the front axle upper holder nuts, then tighten the lower holder nuts.

Torque: 9 lbf·ft (12 N·m, 1.2 kgf·m)

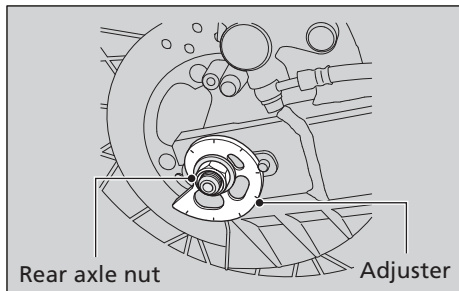
5. After installing the wheel, apply the brake lever and pump the fork several times, then check if the wheel rotates freely. Recheck the wheel if the brake drags or if the wheel does not rotate freely.
6. Installing the speedometer cable and tighten the screw securely.

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

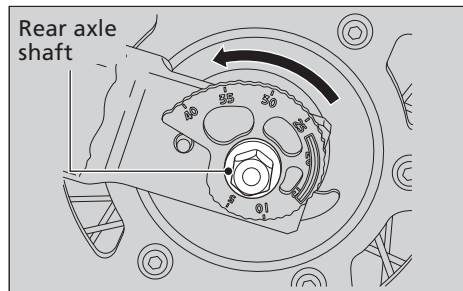
Rear Wheel

Removal

1. Support your motorcycle securely and raise the rear wheel off the ground using a maintenance stand or a hoist.
2. Loosen the rear axle nut.
3. Turn both adjusters 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 rear wheel sprocket by pushing the rear wheel forward.



6. Remove the rear axle shaft, side collars and rear wheel.
 - Avoid getting grease, oil, or dirt on the disc or pad surfaces.
 - Do not push the brake pedal while the brake caliper is removed.

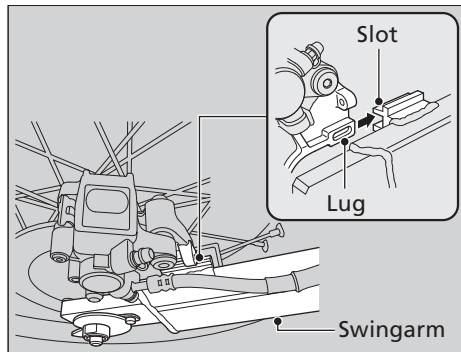
Installation

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 the brake caliper into position, carefully fit the brake disc between the pads to avoid scratching them.

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



3. Adjust the drive chain. ► P.66
4. Install and tighten the rear axle nut.

Torque: 65 lbf·ft (88 N·m, 9.0 kgf·m)

- Failure to provide adequate disc-to-caliper holder clearance may damage the brake discs and impair braking efficiency.

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.

Battery Goes Dead

Charge the battery using a motorcycle battery charger.

Remove the battery from the motorcycle while 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 OFF or LOCK position.

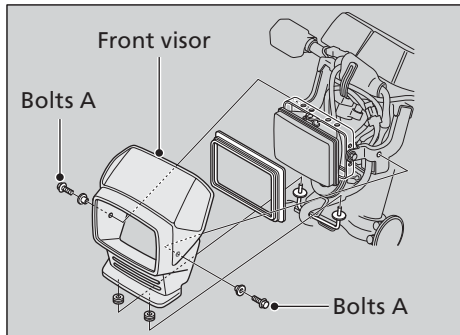
Allow the bulb to cool before replacing it.

Do not use bulbs other than those specified.

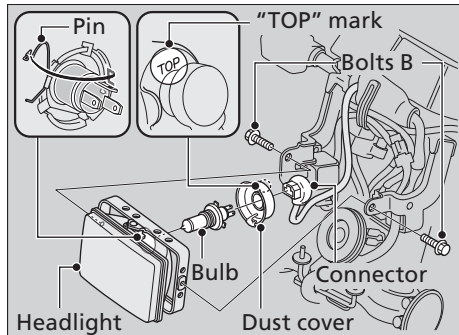
Check the replacement bulb for correct operation before riding.

For the light bulb wattage, see "Specifications". ➔ [P.114](#)

Headlight Bulb



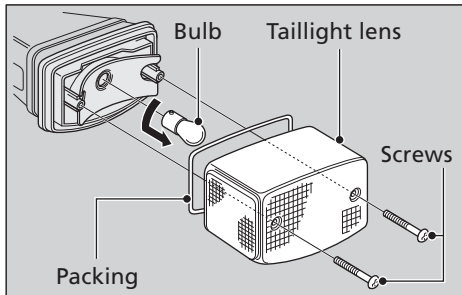
1. Remove the front visor by removing the bolts A.
2. Remove the headlight by removing the bolts B.
3. Pull off the connector without turning.
4. Remove the dust cover.
5. Unhook the pin and remove the bulb.



6. Install a new bulb and parts in the reverse order of removal.
 - ▶ Install the dust cover with its "TOP" mark facing up.

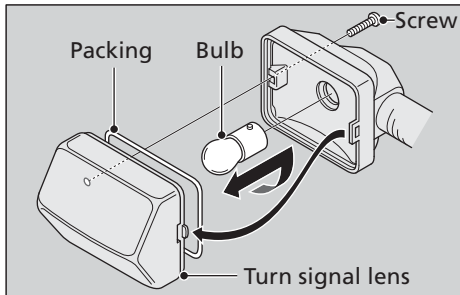
Do not touch the glass surface with your fingers. If you touch the bulb with your bare hands, clean it with a cloth moistened with alcohol.

Brake/Tail light



1. Remove the taillight lens by removing the screws.
2. Slightly press the bulb and turn it counterclockwise.
3. Install a new bulb in the reverse order of removal.

Front/Rear Turn Signal Bulb



1. Remove the turn signal lens by removing the screw.
2. Slightly press the bulb and turn it counterclockwise.
3. Install a new bulb in the reverse order of removal.

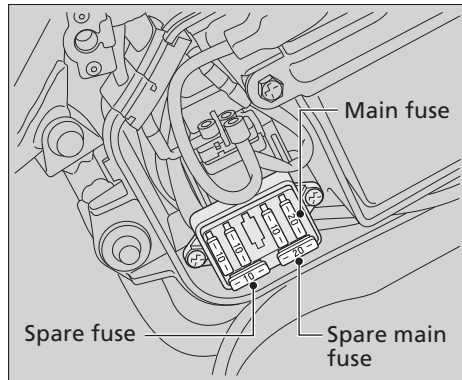
Blown Fuse

Before handling fuses, see “Inspecting and Replacing Fuses”. ➔ P.40

1. Remove the left side cover. ➔ P.48
2. Open the battery compartment cover.
➔ P.51
3. Pull the fuses out one by one check for a blown fuse. Always replace a blown fuse with a spare of the same rating.
4. Close the battery compartment cover.
5. Reinstall the left side cover.

NOTICE

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



Information

Keys	P.93
Instruments, Controls, & Other Features	P.94
Caring for Your Motorcycle	P.95
Storing Your Motorcycle	P.97
Transporting Your Motorcycle	P.98
You & the Environment	P.99
Vehicle Identification Number	P.100
Emission Control Systems	P.101
High Altitude Carburetor Adjustment	P.105
Oxygenated Fuels	P.106
Authorized Manuals	P.107

Warranty Coverage and Service	P.108
Honda Contacts	P.109
USA Reporting Safety Defects	P.111

Keys

Ignition key

Be sure to record the key number provided with the original keys 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

Ignition Switch

The headlight is always ON when the ignition switch is ON. Leaving the ignition switch ON 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 OFF. Failing to do so will drain the battery.

Document Bag

The owner's manual, registration, and insurance information can be stored in the storage bag behind the seat.

Caring for Your Motorcycle

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

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

Washing

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

1. Rinse your motorcycle thoroughly using a 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.

3. Thoroughly rinse your motorcycle with plenty of clean water and dry with a soft, clean cloth.
4. After the motorcycle dries, lubricate any moving parts.
 - ▶ Make sure that no lubricant spills onto the brakes or tires. Brake discs or pads 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 tires and brakes.

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.
- Do not direct water at the muffler:
 - ▶ Water in the muffler can prevent starting and causes rust in the muffler.
- Dry the brakes:
 - ▶ Water adversely affects braking effectiveness. After washing, apply the brakes intermittently at low speed to help dry them.
- Do not direct water 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.

Aluminum Components

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

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

Panels

Follow these guidelines to prevent scratches and blemishes:

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

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

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. Coat chrome pieces with rust-inhibiting oil.
- Lubricate the drive chain. ➤ [P.43](#)
- Place your motorcycle on a maintenance stand and position a block so that both tires are off the ground.
- After rain, remove the body cover and allow the motorcycle to dry.
- Remove the battery (➤ [P.51](#)) 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.

Transporting Your Motorcycle

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

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

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.

Recycle Wastes

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

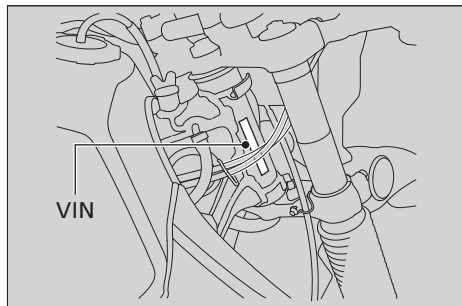
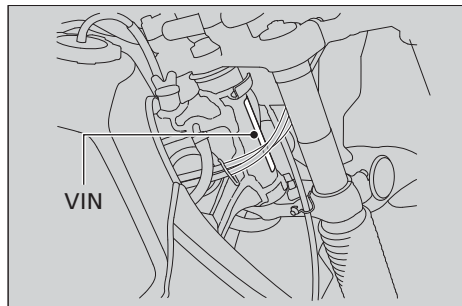
Vehicle Identification Number

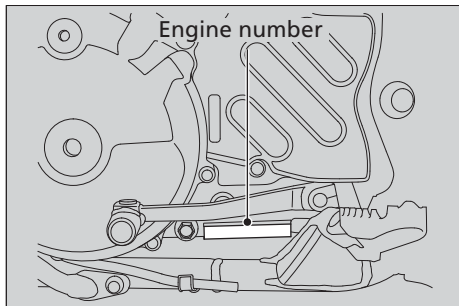
The VIN and engine serial numbers uniquely identify your motorcycle and are required in order to register your motorcycle. They may also be required when ordering replacement parts.

The VIN number is stamped on the right side of the steering head and also appears on the Safety Certification Label attached to the right side of the steering head.

The engine number is stamped on the left side of the crankcase.

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





Emission Control Systems

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

Exhaust Emission Requirements

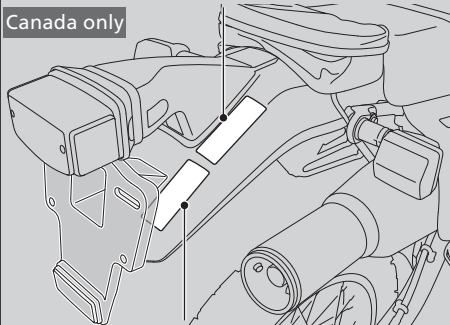
The U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Environment Canada (EC) require that your motorcycle comply with applicable exhaust, crankcase, and fuel permeation emission standards during its useful life, when operated and maintained according to the instructions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

CARB also requires that your motorcycle comply with applicable evaporative emission requirements during its useful life, when operated and maintained according to the instructions provided.

Compliance with the terms of the Distributor's Warranties for Honda Motorcycle Emission Control Systems is necessary in order to maintain a valid emissions system warranty (USA only). The Vehicle Emission Control Information label is attached to the rear fender.

Vehicle emission control information label

Canada only



Vehicle emission control information label

Noise Emission Requirements

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

Exhaust Emission Control System

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

Secondary Air Injection System

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

Evaporative Emission Control System

50-state models

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

Crankcase Emissions Control System

The positive crankcase ventilation system prevents gases that build up in the engine's crankcase from being released into the atmosphere. The gases are drawn into the engine and burned while riding.

Fuel Permeation Emission Control

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

Noise Emission Control System

TAMPERING WITH THE NOISE CONTROL SYSTEM IS PROHIBITED:

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

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

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

2. Removal of, or puncturing of any part of the intake system.
3. Lack of proper maintenance.
4. Replacing any moving parts of the vehicle, or parts of the exhaust or intake system, with parts other than those specified by the manufacturer.

Problems Affecting Motorcycle Exhaust Emissions

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

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

High Altitude Carburetor Adjustment

Your engine's air-fuel mixture becomes overly rich when operated at high altitudes.

Above 6,500 feet (2,000 m), a rich mixture can cause driveability problems, reduce engine performance, and increase fuel consumption. To compensate, you can have the carburetor adjusted for high altitude riding. See your dealer.

However, the carburetor must be returned to standard factory specifications before riding again at lower altitudes (below 5,000 feet, 1,500 m). See your Honda dealer.

Sustained riding at lower altitudes with the lean high-altitude setting may cause rough idling, stalling, or engine damage from overheating.

Oxygenated Fuels

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

The following fuel blends are EPA-approved and have been approved for use in your motorcycle:

- Ethanol (ethyl alcohol) 10 % by volume (max). Gasoline containing ethanol may be marketed under the name “Gasohol”.
- MTBE (Methyl Tertiary Butyl Ether) 15 % by volume (max).
- Methanol (methyl alcohol) 5 % by volume (max) that contain cosolvents and corrosion inhibitors to protect the fuel system. Never use a blend containing more than 5 %.

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

NOTICE

Improper use of oxygenated fuels can damage metal, rubber, and plastic parts of your fuel system. Oxygenated fuel can also damage paint. Damage caused by spilled fuel is not covered by warranty.

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

Authorized Manuals

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

(USA only, Canada: See your dealer to order authorized manuals.)

Also available, but not necessary to service your model, is the Honda Common Service Manual, which explains basic service

information for various systems on Honda motorcycles, motor scooters, and all-terrain vehicles.

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

Special Honda tools are necessary for some procedures.

Publication Item No.	Description
61MY652	2012 XR650L Service Manual
61CM002	Common Service Manual
31MGW600	2012 XR650L Owner's Manual

Order On-Line: www.helminc.com

Order Toll Free: 1-888-CYCLE93

(1-888-292-5393)

(NOTE: For Credit Card Orders Only)

Monday - Friday 8:00 AM - 6:00 PM EST

Warranty Coverage and Service

Coverage

Your new Honda is covered by the following warranties:

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

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

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

and deterioration associated with use of the motorcycle.

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

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

Service

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

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

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

Honda Contacts

American Honda Motor Co., Inc.

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

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

Canada Honda Canada Inc., Customer Relations Dept, 180 Honda Boulevard, Markham, Ontario L6V 0H9, telephone: (888) 946-6329, facsimile: (877) 939-6909.

Please include the following information in your letter:

Honda Contacts

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

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

Your Honda Dealer

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

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

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

Your Honda dealer can also supply information about, riding events, and information about safety training available in your local area, and the Honda Rider's Club of America (USA only).

Honda Rider's Club of America (HRCA)

The Honda Rider's Club of America (HRCA) sponsors local riding chapters at Authorized Honda Dealerships across the country. You can log on to the HRCA Clubhouse website for more information at www.hrca.honda.com.

USA Reporting Safety Defects

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

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

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at:

1-888-327-4236

(TTY: 1-800-424-9153); go to

<http://www.safercar.gov>;

or write to:

Administrator, NHTSA,

1200 New Jersey Avenue, SE.,
Washington, DC 20590.

You can also obtain other information about motor vehicle safety from:

<http://www.safercar.gov>.

Specifications

■ Main Components

Type	XXX
Overall length	86.2 in (2,190 mm)
Overall width	33.7 in (855 mm)
Overall height	49.0 in (1,245 mm)
Wheelbase	57.3 in (1,455 mm)
Minimum ground clearance	13.0 in (330 mm)
Caster angle	27°
Trail	4.0 in (102 mm)
Curb weight	USA type 346 lb (157 kg) CANADA type 347 lb (158 kg)
Maximum weight capacity*1	328 lb (149 kg)
Maximum luggage weight*2	6 lb (3 kg)
Passenger capacity	Rider and 1 passenger
Minimum turning radius	XXX ft (XXX m)

*1 Including rider, passenger, all luggage, and accessories

*2 Includes the weight of the luggage and added accessories

Displacement	39.3 cu-in (644 cm ³)
Bore x stroke	3.94 x 3.23 in (100 x 82 mm)
Compression ratio	8.3:1
Fuel	Unleaded gasoline Recommended: 86 PON or higher
Tank capacity (reserve)	2.77 US gal (10.5 liters) 0.61 US gal (2.3 liters)
Battery	YTX9-BS / 12V-8.0Ah (10 HR)
	1st 2.666
	2nd 1.647
Gear ratios	3rd 1.250
	4th 1.000
	5th 0.840
Reduction ratios (primary / final)	2.029 / 3.000

■ Service Data

Tire size	Front	3.00-21 51S
	Rear	4.60-18 63S
Tire type		Bias-ply, tube
Recommended Tire	Front	DUNLOP K850 BRIDGESTONE TW-301
	Rear	DUNLOP K850 BRIDGESTONE TW-52
Tire air pressure	Front	22 psi (150 kPa, 1.50 kgf/cm ²)
	Rear	22 psi (150 kPa, 1.50 kgf/cm ²)
Minimum tread depth	Front	0.12 in (3.0 mm)
	Rear	0.12 in (3.0 mm)
Spark plug	(standard)	DPR8EA-9 (NGK) X24EPR-U9 (DENSO)
	(cold climate)	DPR7EA-9 (NGK) X22EPR-U9 (DENSO)
	(for extend high speed riding)	DPR9EA-9 (NGK) X27EPR-U9 (DENSO)
	Spark plug gap	0.031 to 0.035 in (0.80 to 0.90 mm)
Idle speed		1,300 ± 100 rpm

Recommended engine oil	API Service Classification SG or higher except oils labeled as energy conserving on the circular API service label, SAE 10W-30, JASO T 903 standard MA, Pro Honda GN4 4-stroke oil (USA & Canada) or Honda 4-stroke oil (Canada only), or an equivalent motorcycle oil	
	After draining	2.0 US qt (1.9 liters)
Engine oil capacity	After draining & engine oil filter change	2.06 US qt (1.95 liters)
	After disassembly	2.4 US qt (2.3 liters)
Recommended brake fluid	Honda DOT 4 Brake Fluid	
Recommended drive chain lubricant	Pro Honda HP Chain Lube	
Drive chain slack	1 3/8 to 1 3/4 in (35 to 45 mm)	
Standard drive chain	RK 520MOZ6 or DID 520V8	
	No. of links	110
Standard sprocket sizes	Engine sprocket	15T
	Rear wheel sprocket	45T

Specifications

■ Bulbs

Headlight	12V-60/55W
Brake/Tail light	12V-27/8W
Front turn signal lights	12V-23W
Rear turn signal lights	12V-23W

■ Fuses

Main fuse	20A
Other fuses	10A

■ Torque Specifications

Crankcase drain bolt	18 lbf-ft (24 N·m, 2.4 kgf·m)
Frame drain bolt	29 lbf-ft (39 N·m, 4.0 kgf·m)
Oil filter bolts	9 lbf-ft (12 N·m, 1.2 kgf·m)
Rear axle nut	65 lbf-ft (88 N·m, 9.0 kgf·m)
Front axle	63 lbf-ft (85 N·m, 8.7 kgf·m)
Front axle holder nut	9 lbf-ft (12 N·m, 1.2 kgf·m)

Information Record

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

A

Accessories.....	13
Air Cleaner	58
Authorized Manuals.....	107

B

Battery.....	38, 51
Brakelight Switch.....	79

Brakes

Fluid.....	42, 62
Pad Wear	63

Braking	11
----------------------	----

Bulb

Brake/Tail Light.....	90
Front/Rear Turn Signal.....	90
Headlight.....	89

C

Caring for Your Motorcycle	96
Choke Lever.....	22
Clutch System.....	71
Color Label	37

Compartment

Owner's Manual.....	27
---------------------	----

D

Drive Chain	65
--------------------------	----

E

Electrical Trouble	88
---------------------------------	----

Emission Control Systems	101
---------------------------------------	-----

Engine

Number.....	100
-------------	-----

Oil.....	41, 52
----------	--------

Oil Filter	54
------------------	----

Starting	22
----------------	----

Stop Switch.....	20, 94
------------------	--------

Stopping	94
----------------	----

Environment	99
--------------------------	----

F

Flooded Engine	23
Front Suspension	75

Fuel

Fuel valve	20
Recommended	25
Tank Capacity.....	25
Fuels Containing Alcohol	106
Fuses.....	40, 91

G

Gasohol.....	106
Gasoline	25, 106
Gear Range Indicator	18

H

Headlight Aim	79
Headlight Dimmer Switch	20
Helmet Holder.....	27
High Beam Indicator.....	19
Honda Contacts	109
Horn Button	20

I**Ignition Cut-off System**

Side Stand	64
Ignition Key	93
Ignition Switch	21
Indicators.....	19
Information Record	115
Instruments	18

L

Labels.....	7
Load Limits	14
Loading Guidelines.....	14

M**Maintenance**

Fundamentals.....	34
Importance	29
Safety.....	30
Schedule	31
Maximum Weight Limit.....	14
Modifications	13

N

Neutral Indicator 19

O

Odometer 18

Oil

Engine 41, 52

Oxygenated Fuels 106

P

Parking 12

Parts Location 16

Protective Apparel 9

R

Rear Suspension 77

Recommended

Fuel 25

Oil 41

Refueling 25

Removal

Battery 51

Left side cover 48

Right side cover 49

Seat 47

Shroud 50

Reporting Safety Defects(U.S.) 111

Riding Precautions 10

S

Safety Labels 7

Safety Precautions 9

Seat 47

Shifting Gears 24

Side Stand 64

Side Stand Ignition Cut-off System 64

Specifications 112

Speedometer 18

Start Button 20

Starting the Engine 22

Steering Lock.....	21
Stopping Engine	94
Storage	
Compartment	27
Owner's Manual.....	27, 94
Storing Your Motorcycle	97

T

Throttle.....	74
Tires	
Air Pressure	44
Puncture	82
Replacing	44, 82
Transporting Your Motorcycle.....	98
Tripmeter	18
Tripmeter Reset Knob.....	18
Troubleshooting	80
Turn signal indicator.....	19

V

Vehicle Identification Number	100
-------------------------------------	-----

W

Warranty Coverage and Service	108
Washing Your Motorcycle.....	95
Weight Limit.....	14
Wheels	
Front removal	83
Rear removal	85