2022

Owner's Manual

CRF150R/RB



HONDA

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

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

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IMPORTANT NOTICE

FOR COMPETITION USE ONLY

This vehicle is designed, manufactured and sold for closed-course competition use only. It does not conform to Federal Motor Vehicle Safety Standards or U.S. EPA Noise and Emission Standards. Operation on public streets, roads, highways or for off-road recreation is illegal.

State and federal laws prohibit operation of this vehicle except in an organized racing or competitive event on a closed course, or by permit issued by the local governmental jurisdiction. This vehicle is sold "as is" with no warranties.
This vehicle does not conform to AMA noise emission regulation for 2021 year.

FOR EXPERIENCED RIDERS, NO PASSENGERS

This vehicle is designed as an operator-only vehicle and for use by experienced riders only. The load limit and seating configuration do not safely permit the carrying of a passenger.

Welcome

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

Your vehicle is a high performance racing motorcycle that utilizes the latest motocross technology and is intended for competition use in sanctioned, closed-course events by experienced riders only.

Be aware that motocross is a physically demanding sport that requires more than just a fine vehicle. To do well, you must be in excellent physical condition and be a skillful rider. For the best results, work diligently on your physical conditioning and practice frequently.

To ensure your safety and riding pleasure:

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

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

When service is required, remember that your Honda dealer knows your vehicle best. If you have the required mechanical "know-how" and tools, you can purchase an official Honda Service Manual to help you perform many maintenance and repair tasks. P. 45

You may also want to visit our website at www.powersports.honda.com.
Canada www.honda.ca.
Happy riding!

A Few Words About Safety

Your safety, and the safety of others, is very important. Operating this vehicle safely is an important responsibility.
To help you make informed decisions about safety, we have provided operating procedures and other information on safety labels in this owner's manual and competition handbook. This information alerts you to potential hazards that could hurt you or others.
Of course, it is not practical or possible to warn you about all hazards associated with operating or maintaining a vehicle. You must use your own good judgment.

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

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

⚠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 vehicle, other property, or the environment.

Contents

Vehicle Safety P. 2

Operation Guide P. 10

Maintenance P. 21

Troubleshooting P. 33

Information P. 35

Specifications P. 48

Vehicle Safety

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

Safety Guidelines ..... P. 3
Safety Labels ..... P. 6
Safety Precautions ..... P. 7
Riding Precautions ..... P. 8
Accessories & Modifications ..... P. 9

Safety Guidelines

Follow these guidelines to enhance your safety:

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

Always Wear a Helmet

It's a proven fact: helmets and protective apparel significantly reduce the number and severity of head and other injuries. So always wear an approved helmet and protective apparel. ➔P. 7

Before Riding

Make sure that you are physically fit, mentally focused and free of alcohol and drugs. Check that you are wearing an approved helmet and protective apparel.

Take Time to Get to Know Your Vehicle

Because every vehicle is unique, take time to become thoroughly familiar with how this one operates and responds to your commands before placing your machine, and yourself, in competition.

Ride within Your Limits

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

Never Carry a Passenger

There are no handholds, seat, or footrests to carry a passenger.

Continued

Don't Drink or Use Drugs and Ride

Alcohol or drugs and riding don't mix. Even one alcoholic drink can reduce your ability to respond to changing conditions, and your reaction time gets worse with every additional drink. The same is true for drug use. Don't drink or use and ride, and don't let your friends do it either.

Keep Your Honda in Safe Condition

Maintaining your vehicle properly is critical to your safety. A loose bolt, for example, can cause a breakdown in which you can be seriously injured.

Important Message to Parents

Your child's safety is very important to Honda. That's why we urge you to read this message before you let any young person ride this vehicle. Competitive riding can be fun. But bad judgment can result in injury, and we don't want that to happen. As a parent, you can help prevent accidents by making good decisions about when and how your youngster rides this vehicle.

- Remember, this vehicle is designed only for competition use by experienced junior riders. It is an operator-only model, and the maximum load capacity is 150 lb (68 kg). Rider weight must not exceed this limit.
- The junior rider must be tall enough to hold the vehicle up while straddling it with both feet on the ground. They must also be strong enough to pick up the vehicle if it is on its side.
- The parent and junior rider must be fully familiar with the vehicle, the vehicle controls, and control functions. Both must also fully understand everything in this manual before riding begins.
- For your child's safety, be sure to make prepractice and pre-race inspections, and impress on the junior rider the importance of checking all the items thoroughly before riding.

Carbon Monoxide Hazard

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

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

⚠WARNING

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

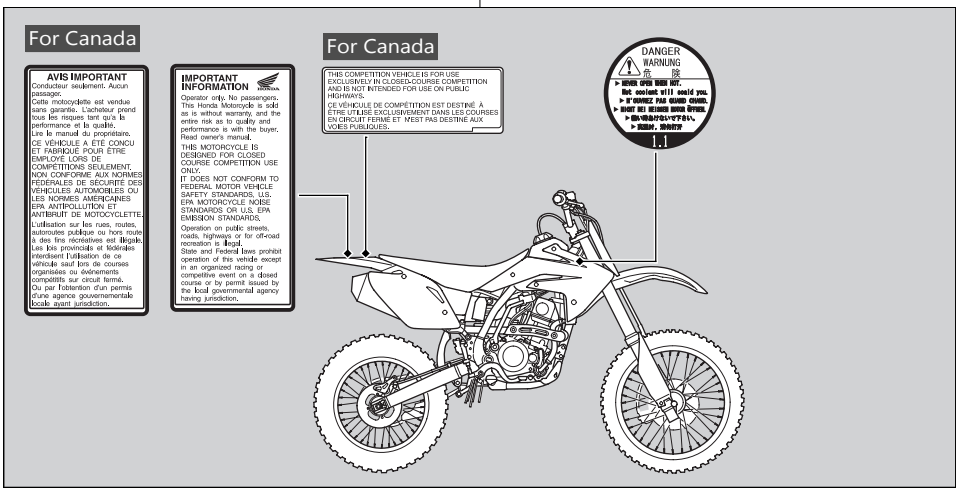
Breathing this colorless, odorless gas can quickly cause unconsciousness and lead to death.

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

Safety Labels

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

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



Safety Precautions

Protective Apparel

Make sure that you are wearing an approved helmet, eye protection, and other appropriate riding gear.

Helmet

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

- Must fit comfortably but securely, with the chin strap fastened.
- 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 always wear an approved helmet, eye protection, and protective apparel.

Protective Gear

Whether you're practicing to improve your skills or riding in competition, always wear an approved helmet, eye protection, and proper protective gear.

Riding Precautions

Break-in Period

During the first operating day or 15 miles (25 km) of running, follow these guidelines to ensure your vehicle's future reliability and performance.

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

This same procedure should be followed each time when:

- Piston is replaced
- Piston rings are replaced
- Cylinder is replaced
- Crankshaft or crank bearings are replaced

Refueling and Fuel Guidelines

Follow these guidelines to protect the engine and fuel system:

- Use only unleaded gasoline.
- Use the recommended octane number. Using lower octane gasoline will result in decreased engine performance.
- Do not use fuels containing a high concentration of alcohol. ➔ P. 44
- 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 or approved for your vehicle by Honda or make modifications to your vehicle from its original design. Doing so can make it unsafe.

⚠WARNING

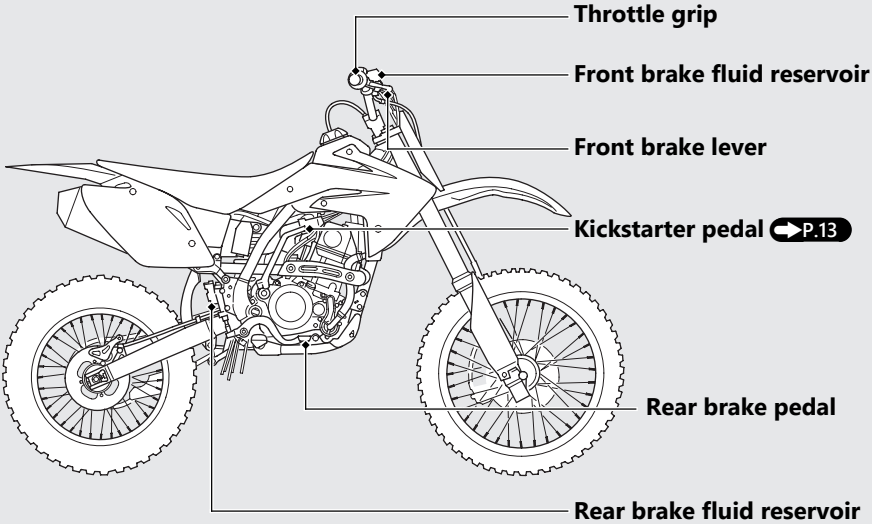
Improper accessories or modifications can cause a crash in which you can be seriously hurt or killed.

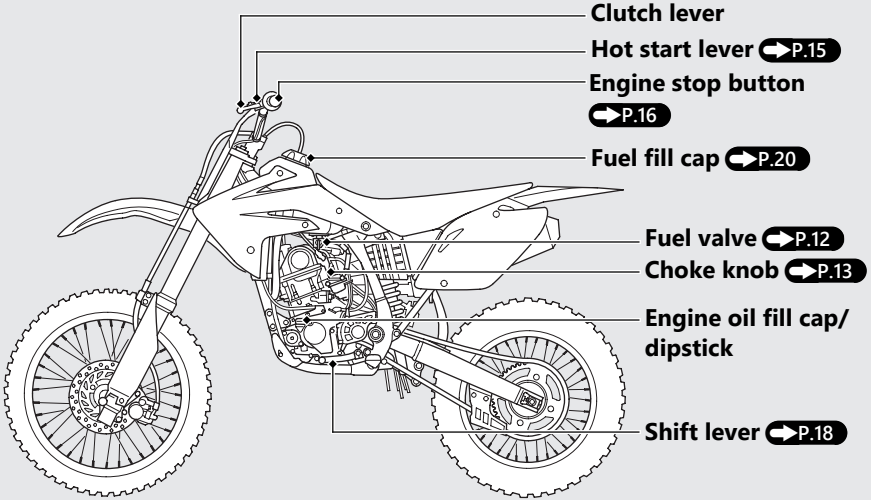
Follow all instructions in this owner's manual regarding accessories and modifications.

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

Do not attempt to modify the vehicle to carry a passenger. The subframe was not designed to carry the additional weight of a passenger.

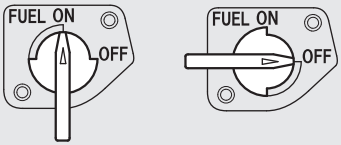
Parts Location




Clutch lever
Hot start lever P.15
Engine stop button
P.16
Fuel fill cap P.20
Fuel valve P.12
Choke knob P.13
Engine oil fill cap/
dipstick
Shift lever P.18

Fuel Valve

The two-way fuel valve is used to control the flow of fuel from the fuel tank to the carburetor.

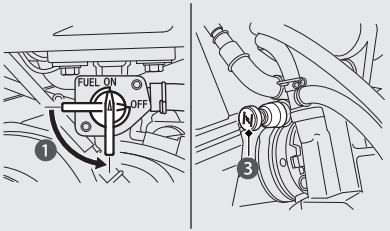


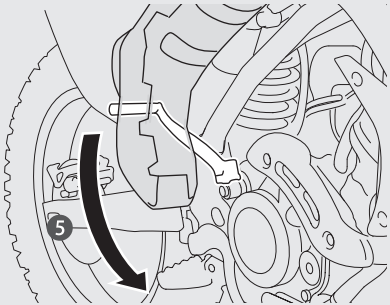
ON **OFF**

ON: normal position for riding.
OFF: for stopping, storing, or transportation.

Starting the Engine

Start your engine using the following procedure.





To restart a warm engine, follow the procedure for "Warm Engine Starting".

NOTICE

- Extended fast idling and revving the engine can damage the engine and the exhaust system.
- Snapping the throttle or fast idling for more than about 5 minutes may cause exhaust pipe discoloration.
- Do not operate the kickstarter while the engine is running as engine damage could result. Do not apply excessive force on the kickstarter.
- Fold up the kickstarter after the kickstarter is returned to the pedal stop.

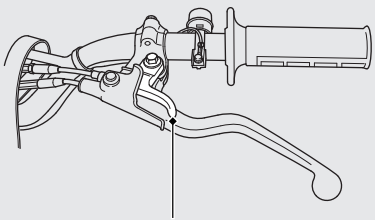
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Starting the Engine *(Continued)*

Cold Engine Starting

1. Turn the fuel valve ON.
2. Shift the transmission into neutral.
3. If the temperature is 95°F (35°C) or below, pull the choke knob fully out.
4. If the temperature is below 32°F (0°C), open the throttle two or three times.
   - ► The engine requires a richer mixture for starting in cold weather. When the throttle is so opened, the accelerator pump will feed extra fuel to the cylinder, thereby facilitating starting in cold weather.
5. With the throttle closed, operate the kickstarter starting from the top of the kickstarter stroke, and kick through to the bottom of the stroke with a rapid, continuous motion.
   - ► Do not open the throttle, As the carburetor is equipped with an accelerator pump, excessive fuel will be charged into the engine, and the spark plug will be fouled if the throttle is opened and closed repeatedly. Excessive fuel in the engine makes kickstarting difficult.
6. About a minute after the engine starts, push the choke knob all the way to fully OFF. If idling is unstable, open the throttle slightly.

Warm Engine Starting



① Turn the fuel valve ON.
② Shift the transmission into neutral.
③ Pull the hot start lever and kick-start the engine.
▶ Do not open the throttle.
④ As soon as the engine starts, release the hot start lever.

Starting the engine after a stall during riding or after a fall

❶ Shift the transmission into neutral.
❷ Pull the hot start lever and kick-start the engine.
▶ Do not open the throttle.
❸ As soon as the engine starts, release the hot start lever.

Starting the Engine *(Continued)*

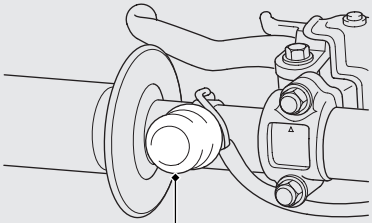
Starting the engine excessively charged with fuel by throttle blipping or other reasons

If the engine fails to start after repeated attempts, it may be flooded with excess fuel. To clear a flooded engine:

1. Shift the transmission into neutral.
2. With the throttle fully opened, repeat kickstarter operation approximately ten times very slowly to discharge excessive fuel from the engine.
3. Pull the hot start lever and kick-start the engine.
   ▶ Do not open the throttle.
4. As soon as the engine starts, release the hot start lever.

When you stop the engine

Normal Engine Stop



Engine stop button

1. Shift the transmission into neutral.
2. Turn the fuel valve OFF.
3. Lightly open the throttle two or three times, and then close it.
4. Push and hold the engine stop button until the engine stops completely.

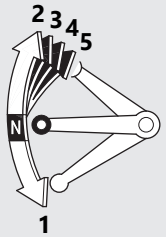
Failure to close the fuel valve may cause the carburetor to overflow, result in hard starting.

Emergency Engine Stop

To stop the engine in an emergency, push and hold the engine stop button.

Shifting Gears

Your vehicle transmission has 5 forward gears in a one-down, four-up shift pattern.



1. After the engine has been warmed up, the vehicle is ready for riding.
2. While the engine is idling, pull in the clutch lever and depress the shift lever to shift into 1st (low) gear.
3. Slowly release the clutch lever and at the same time gradually increase engine speed by opening the throttle. Coordination of the throttle and clutch lever will assure a smooth positive start.

NOTICE

When moving off from a standing start, be careful not to use too much throttle. The vehicle may "wheelie" over backwards.

4. When the vehicle attains a moderate speed, close the throttle, pull in the clutch lever and shift to 2nd gear by raising the shift lever.

5. This sequence is repeated to progressively shift to 3rd, 4th, and 5th (top) gear. Raise the shift lever to shift to a higher gear and depress it to downshift. Each stroke of the shift lever engages the next gear in sequence. The shift lever automatically returns to the horizontal position when released.

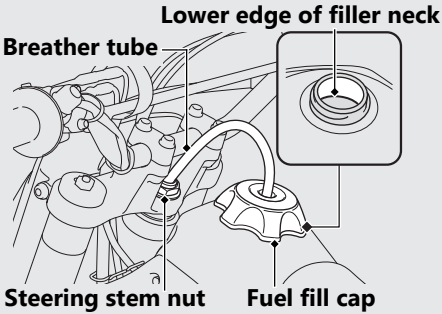
NOTICE

Downshifting can help slow your vehicle, especially on downhills. However, downshifting when engine rpm is too high can cause engine damage.

NOTICE

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

Refueling



Do not fill with fuel above the lower edge of the filler neck.

Fuel type: Unleaded gasoline only

Recommended fuel octane number: Pump Octane Number (PON) 91 or higher.

Tank capacity: 1.14 US gal (4.3 L)

Refueling and Fuel Guidelines P.8

Opening the Fuel Fill Cap

1. Pull the breather tube out of the steering stem nut.
2. Turn the fuel fill cap counterclockwise and remove it.

Closing the Fuel Fill Cap

1. After refueling, close the fuel fill cap securely.
2. Insert the breather tube in the steering stem nut.

⚠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 flames away.
- Only handle fuel outdoors.
- Wipe up spills immediately.

Maintenance

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

Importance of Maintenance ..... P. 22
Maintenance Schedule ..... P. 23
Maintenance Fundamentals ..... P. 26

Importance of Maintenance

Keeping your vehicle well-maintained is absolutely essential to your safety and to protect your investment, obtain maximum performance, avoid breakdowns, and reduce air pollution. Maintenance is the owner's responsibility. Be sure to inspect your vehicle before each ride and perform the periodic checks specified in the Maintenance Schedule.
➔P. 23

⚠WARNING

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

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

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.
- Place your vehicle on a firm, level surface using an optional workstand 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

To maintain the safety and reliability of your vehicle, regular inspection and service is required as shown in the Maintenance Schedule that follows.

The Maintenance Schedule lists items that can be performed with basic mechanical skills and hand tools. Procedures for these items are provided in Competition Handbook. The Maintenance Schedule also includes items that involve more extensive procedures and may require special training, tools, and equipment. Therefore, we recommend that you have your dealer perform these tasks unless you have advanced mechanical skills and the required tools. Procedures for items in this schedule are provided in an official Honda Service Manual available for purchase from your dealer. ➔P. 45

Service intervals in the maintenance schedule are expressed in terms of motos and riding hours. To avoid overlooking required service, we urge you to develop a convenient way to record the number of motos and/or hours you ride.

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

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

Perform the Pre-ride Inspection (➡ P. 26) at each scheduled maintenance period.

Items \ Frequency	NOTE	Each race or about 2.5 hours	Every 3 races or about 7.5 hours	Every 6 races or about 15.0 hours	Every 9 races or about 22.5 hours
Throttle Operation		I			
Hot Starter		I			
Air Filter	NOTE 1	C			
Crankcase Breather		I			
Spark Plug		I			
Valve Clearance/Decompressor System	NOTE 4			I	
Engine Oil	NOTE 3			R	
Engine Oil Filter	NOTE 3			R	
Engine Idle Speed		I			
Piston and Piston Rings				R	
Piston Pin				R	
Transmission Oil	NOTE 5	I		R	
Radiator Coolant	NOTE 2	I			
Cooling System		I			

WE RECOMMEND THESE ITEMS BE SERVICED BY REFERRING TO THE OFFICIAL HONDA SERVICE MANUAL.

This maintenance schedule is based on average riding conditions. Machines subjected to severe use require more frequent servicing.

Maintenance Legend

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

Items \ Frequency	NOTE	Each race or about 2.5 hours	Every 3 races or about 7.5 hours	Every 6 races or about 15.0 hours	Every 9 races or about 22.5 hours
Drive Chain		I L	Ⓡ		
Drive Chain Slider		I			
Drive Chain Roller		I			
Drive Sprocket		I			
Driven Sprocket		I			
Brake Fluid	NOTE 2	I			
Brake Pads Wear		I			
Brake System		I			
Clutch System	NOTE 5	I			
Control Cables		I L			
Exhaust Pipe/Muffler		I			
Suspension		I			
Swingarm/Shock Linkage			L		
Fork Oil	NOTE 3		Ⓡ		
Nuts, Bolts, Fasteners		I			
Wheels/Tires		I			
Steering Head Bearings					I

Notes: 1 : Clean after every moto or after dusty riding conditions.
2 : Replace every 2 years. Replacement requires mechanical skill.
3 : Replace after the first break-in ride.
4 : Inspect after the first break-in ride.
5 : Replace the transmission oil if the clutch discs and plates are replaced.

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.

Refer to the Competition Handbook for procedures.

Competitive riding can be tough on a vehicle, so it's important to inspect your vehicle and correct any problems you find before each ride.

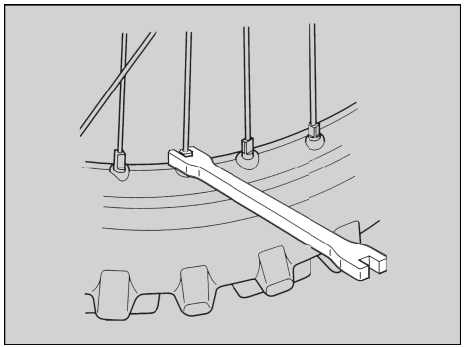
Check the following before each ride:

- Engine oil level
- Transmission oil level
- Fuel line for condition
- Coolant for proper level
- Cooling system and hoses for condition
- Spark plug for proper heat range, carbon fouling and spark plug wire terminal for looseness
- Air cleaner for condition and contamination
- Clutch lever freeplay
- Hot start lever freeplay
- Breather drain for cleaning
- Steering head bearing and related parts for condition
- Throttle operation
- Tires for damage or improper inflation pressure
- Spokes for looseness
- Rim locks for looseness
- Front and rear suspension for proper operation
- Front and rear brakes, check operation
- Drive chain for correct slack and adequate lubrication
- Drive chain sliders and drive chain rollers for damage or wear
- Exhaust pipe/Muffler for looseness
- Every possible part for looseness (such as cylinder head bolts, engine mounting bolts/nuts, axle nuts, handlebar holder bolts, fork bridge pinch bolts, drive chain adjuster, lock nuts, drive chain roller bolt/nut, wire harness connectors)

Between Motos & Practice Maintenance

After practice, or between motos, you have a chance to make additional checks and adjustments.

- Clean accumulated dirt from under the fenders and off the wheels, suspension components, handgrips, controls, and footpegs. A stiff, nylon parts cleaning brush works well.
- Check tire air pressure.
- Check spoke tension, and make sure the rim locks are secure.



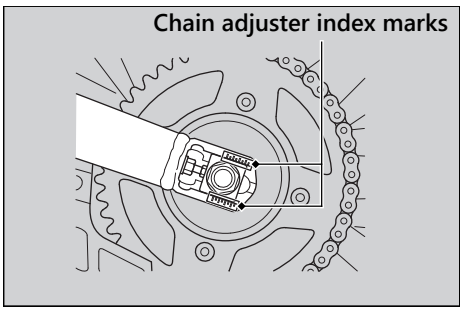
- Check to make sure the sprocket bolts and nuts are secure.
- Clean the sides of the drive chain with a stiff, nylon parts-cleaning brush. Lubricate and adjust the chain as necessary.

Do not perform maintenance while the engine is running. Injury to your fingers or hands may result.

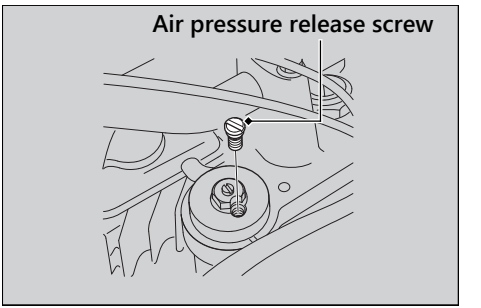
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- After adjustment, check that the chain adjuster index marks are in the same position on each side. This will ensure that the rear wheel is in proper alignment and allow maximum performance from the rear disc brake.

Maintaining proper wheel alignment will also extend brake pad lifespan.



- Suspend the front wheel above the ground and use the pressure release screws to release the built-up pressure in the forks. This pressure is caused by normal fork action while riding.



Tighten the pressure release screws to the specified torque:

Torque: 1.0 lbf·ft (1.3 N·m, 0.1 kgf·m)

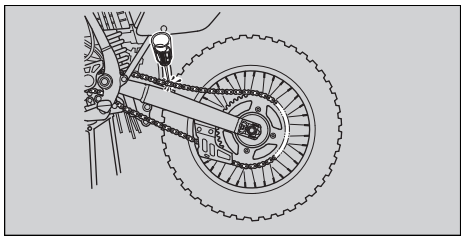
After Competition Maintenance

It is important to the long term performance of your vehicle to practice a consistent maintenance program. Right after an event is a good time to begin your next maintenance cycle.

After Moto Lubrication

Apply a light coating of rust-inhibiting oil to the drive sprocket and any steel portions of the chassis or engine where the paint has worn away.
This will prevent rusting of the exposed metal. Apply rust-inhibiting oil more heavily if the event was particularly wet or muddy. Take care to avoid spraying any oil near the brake pads or the brake discs.
Take care to prevent catching your fingers between the chain and sprocket.

Remove the drive chain, and clean and lubricate it. Be sure the chain is wiped clean and is dry before lubricating the chain.



Routine Cleaning

If your vehicle is only slightly dirty, it is best to clean it by hand with the aid of a stiff bristled nylon brush and some clean rags.

Take care to prevent catching your fingers between the chain and sprocket.

A variety of reasonably priced cleaning brushes are available from variety, drug, food, and hardware stores. Some of these brushes are extremely useful in removing dirt from the many tight contours of the metal pieces of your vehicle.
Avoid using stiff, abrasive brushes on the plastic or rubber parts.

If your vehicle was exposed to sea air or salt water, rinse it as soon as possible after the event, dry it, and apply a spray lubricant to all metal parts.

If you decide to wash your vehicle or use cleaners, refer to "Caring for Your Vehicle".
➔P. 36

Replacing Parts

Always use Honda Genuine Parts or their equivalents to ensure reliability and safety.

⚠WARNING

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

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

Tires (Inspecting/Replacing)

Checking the Air Pressure

Visually inspect your tires and use an air pressure gauge to measure the air pressure before each ride.

Always check air pressure when your tires are cold.

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

Inspecting for Damage

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

Inspecting for Abnormal Wear

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

Inspecting Rims and Valve Stems

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

⚠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.

Continued

Have your tires replaced by your dealer.
For recommended tires and air pressure, see "Specifications." P. 48
Follow these guidelines whenever you replace tires.

- Use the recommended tires or equivalents of the same size, construction, speed rating, and load range.
- Remember to replace the inner tube whenever you replace a tire. The old tube will probably be stretched, and it could fail if installed in a new tire.
- If a tube is punctured or damaged, you should replace it as soon as possible. A repaired tube may not have the same reliability as a new one, and it may fail while you are riding.
  Use a replacement tube equivalent to the original.

⚠WARNING

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

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

Troubleshooting

Engine Will Not Start.....P. 34

Engine Does Not Start

Check the following items:

- Check the correct engine starting sequence. P. 13
- Check that there is gasoline in the fuel tank.

If the problem continues, have your vehicle inspected by your dealer as soon as possible or refer to an official Honda Shop Manual available for purchase from your dealer.

Information

Caring for Your Vehicle.....P. 36
Storing Your Vehicle.....P. 39
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Caring for Your Vehicle

Frequent cleaning and polishing is important to ensure the life of your Honda. A clean vehicle makes it easier to spot potential problems. While you're cleaning, be sure to look for damage, wear, and gasoline or oil leaks.

Washing

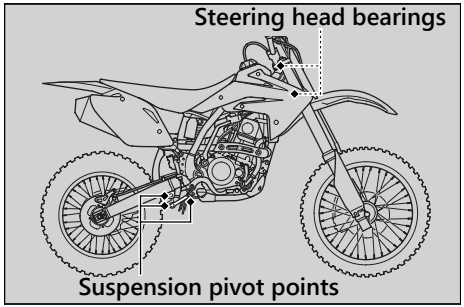
Allow the engine, muffler, brakes, and other high-temperature parts to cool before washing.

1. Rinse your vehicle thoroughly using a low pressure garden hose to remove loose dirt.
2. If necessary, use a sponge or a soft towel with mild cleaner to remove road grime.
   - ▶ Clean the plastic components with extra care to avoid scratching them.
     Avoid directing water into the air cleaner, muffler, and electrical parts.
   - ▶ Do not use steel wool to clean the frame as it could damage or discolor the frame surface. Scotch Brite Hand Pad #7447-maroon is for removing stains on the non-coated aluminum frame only.
3. Thoroughly rinse your vehicle with plenty of clean water and dry with a soft, clean cloth.
4. After the vehicle dries, lubricate any moving parts.
   - ▶ Make sure that no lubricant spills onto the brakes or tires. Brake discs, pads, drum or shoes contaminated with oil will suffer greatly reduced braking effectiveness and can lead to a crash.
5. Lubricate the drive chain immediately after washing and drying the vehicle.
6. Apply a coat of wax to prevent corrosion.
   - ▶ Avoid products that contain harsh detergents or chemical solvents. These can damage the metal, paint, and plastic on your vehicle.
     Keep the wax clear of the tires and brakes.
   - ▶ If your vehicle has any matte painted parts, do not apply a coat of wax to the matte painted surface.

Washing Precautions

Follow these guidelines when washing:

- Do not use high-pressure washers:
  - ▶ High-pressure water cleaners can damage moving parts and electrical parts, rendering them inoperable.
  - ▶ Water in the air intake can be drawn into the carburetor and/or enter the air cleaner.
  - ▶ If you use a high pressure washer, avoid spraying the following areas:
    - brake master cylinders
    - drive chain
    - engine stop button
    - muffler outlet
    - steering head bearings
    - suspension pivot points
    - under fuel tank
    - carburetor
    - under seat
    - wheel hubs



- 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.

Continued

- Do not use wax or polishing compounds on matte painted surfaces:
  - ▶ Use a soft cloth or sponge, plenty of water, and a mild detergent to clean matte painted surfaces. Dry with a soft clean cloth.

Condensation Control

Some condensation can form within the transmission cavity as well. This is natural and just one more reason you should change the engine and transmission oil often.

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.

Exhaust Pipe and Muffler

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

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

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

NOTICE

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

Storing Your Vehicle

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

- Wash your vehicle.
- Change the engine oil and filter.
- Replace the transmission oil.
- Inflate the tires to their recommended pressures.
- Drain the coolant.
- Lubricate the drive chain.
- Place your vehicle on an optional workstand or equivalent to raise both tires off the ground.
- Drain the fuel from the fuel tank and carburetor into an approved gasoline container. Turn the fuel valve OFF and loosen the carburetor drain screw. Drain gasoline into an approved container. Retighten the drain screw.
- Stuff a rag into the muffler outlet. Then, tie a plastic bag over the end of the muffler to prevent moisture from entering.
- Store your vehicle in an unheated area, free of dampness, away from sunlight, with a minimum of daily temperature variation.
- Cover your vehicle with a porous material. Avoid using plastic or similar non-breathing, coated materials that restrict air flow and allow heat and moisture to accumulate.

Continued

To remove your vehicle from storage, follow these guidelines:

- Uncover and clean your vehicle.
- Change the engine oil if more than 4 months have passed since the start of storage.
- Change the transmission oil if more than 4 months have passed since the start of storage.
- Uncover the end of the muffler and remove the rag from the muffler outlet.
- Fill the fuel tank with the recommended fuel. ➡P. 20
- Pour a fresh recommended coolant mixture slowly into the radiator fill hole up to the filler neck.
- Perform all maintenance checks. ➡P. 26

Transporting Your Vehicle

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

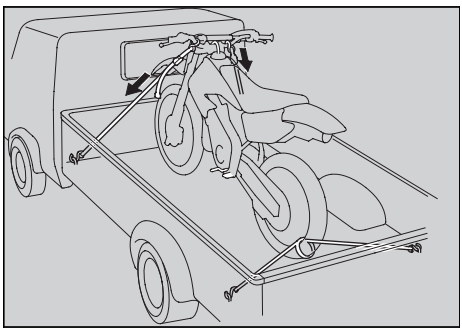
NOTICE

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

If you use a truck or motorcycle trailer to transport your vehicle, we recommend that you follow these guidelines:

- Use a loading ramp.
- Drain the fuel from the fuel tank and carburetor into an approved gasoline container.

- Secure the vehicle in an upright position, using motorcycle tie-down straps. Avoid using rope, which can loosen and allow the vehicle to fall over.



To secure your vehicle, brace the front wheel against the front of the truck bed or trailer rail. Attach the lower ends of two straps to the tie-down hooks on truck bed or trailer rail. Attach the upper ends of the straps to the handlebar (one on the right side, the other on the left), close to the fork.

Check that the tie-down straps do not contact any control cables or electrical wiring.

Tighten both straps until the front suspension is compressed about half-way. Too much pressure is unnecessary and could damage the fork seals.

Use another tie-down strap to keep the rear of the vehicle from moving.

We recommend that you do not transport your vehicle on its side. This can damage the vehicle, and leaking gasoline could be a hazard.

You & the Environment

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

Choose Sensible Cleaners

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

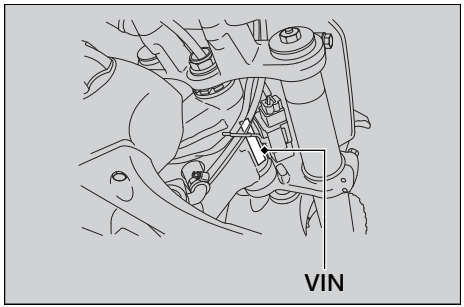
Recycle Wastes

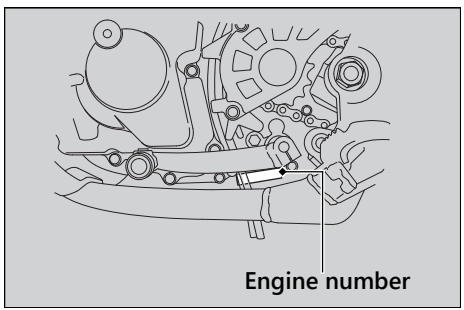
Put oil and other toxic wastes in approved containers and take them to a recycling center. Call your local or state office of public works or environmental services to find a recycling center in your area and to get instructions on how to dispose of non-recyclable wastes. Do not place used engine oil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

Vehicle Identification Number

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

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





Oxygenated Fuels

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

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

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

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

NOTICE

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

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

Authorized Manuals

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

Also available, but not necessary to service your model, is the Honda Common Service Manual, which explains basic service information for various systems on Honda motorcycles, scooters, ATV, and SxS.
USA The Winter Storage Guide in conjunction with the Owner's Manual and Service Manual can help you prepare your Honda motorcycle, scooter, ATV, and SxS for winter storage.
These Honda manuals are written for the professional technician. However, if you possess the proper tools, observe the safety standards, and are mechanically capable, you should find them easy to use.
Special Honda tools are necessary for some procedures.

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(1-888-292-5393)
(NOTE: For Credit Card Orders Only)
Monday - Friday 8:00 AM - 6:00 PM EST

Description
2022 CRF150R/RB Service Manual
Common Service Manual (61CSM00)
USA Winter Storage Guide (S9507)
2022 CRF150R/RB Owner's Manual
2022 CRF150R/RB Competition Handbook

Honda Contacts

American Honda Motor Co., Inc.

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

POST MAIL

Powersports Customer Relations
American Honda Motor Co., Inc.,
P.O. Box 2200, Torrance, CA 90509-2200
Mailstop: 100-4W-5F

PHONE

Telephone: (866) 784-1870

ONLINE CUSTOMER SERVICE

Website: *www.powersports.honda.com/contact-us*

Canada

Honda Canada Inc.
Customer Relations Department,
180 Honda Boulevard
Markham, Ontario
L6C 0H9
Telephone: (888) 946-6329
Fax: (877) 939-0909
E-mail: honda_cr@ch.honda.com

Please include the following information in your letter:

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

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

Your Honda Dealer

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

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

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

Dimension

Overall length	**CRF150R**	72.1 in (1,832 mm)
	CRF150RB	74.8 in (1,900 mm)
Overall width		30.3 in (770 mm)
Overall height	**CRF150R**	44.6 in (1,133 mm)
	CRF150RB	46.1 in (1,171 mm)
Wheelbase	**CRF150R**	49.6 in (1,260 mm)
	CRF150RB	50.6 in (1,285 mm)
Seat height	**CRF150R**	32.8 in (832 mm)
	CRF150RB	34.1 in (866 mm)
Footpeg height	**CRF150R**	14.9 in (379 mm)
	CRF150RB	16.3 in (413 mm)
Minimum ground clearance	**CRF150R**	11.9 in (301 mm)
	CRF150RB	13.2 in (336 mm)
Caster angle	**CRF150R**	27°2'
	CRF150RB	27°48'
Trail length	**CRF150R**	3.1 in (78 mm)
	CRF150RB	3.8 in (96 mm)

Frame

Tire size	Front	**CRF150R**	70/100-17 40M
		CRF150RB	70/100-19 42M
	Rear	**CRF150R**	90/100-14 49M
		CRF150RB	90/100-16 52M
Tire type	Bias-ply, tube		
Recommended tire	**CRF150R USA**	Front	DUNLOP MX71F
		Rear	DUNLOP MX71
	CRF150R Canada	Front	BRIDGESTONE M23
		Rear	BRIDGESTONE M22
	CRF150RB USA	Front	DUNLOP MX71F
		Rear	DUNLOP MX71
	CRF150RB Canada	Front	BRIDGESTONE M61
		Rear	BRIDGESTONE M58
Tire pressure (cold)	Front	15 psi (100 kPa, 1.0 kgf/cm^2)	
	Rear	15 psi (100 kPa, 1.0 kgf/cm^2)	
Fuel	Unleaded gasoline, pump octane number of 91 or higher		
Fuel tank capacity	1.14 US gal (4.3 L)		

■ Engine

Bore x stroke	2.5984 x 1.7235 in (66.000 x 43.777 mm)	
Displacement	9.136 cu-in (149.77 cm^3)	
Compression ratio	11.7 : 1	
Valve clearance (cold)	Intake	0.006 ± 0.001 in (0.16 ± 0.03 mm)
	Exhaust	0.010 ± 0.001 in (0.26 ± 0.03 mm)
Engine oil capacity	After draining	0.59 US qt (0.56 L)
	After draining and oil filter change	0.62 US qt (0.59 L)
	After disassembly	0.74 US qt (0.70 L)
Recommended engine oil	API Service Classification SJ or higher except oils labeled as energy conserving or resource 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, or an equivalent motorcycle oil	
Transmission oil capacity	After draining	0.60 US qt (0.57 L)
	After disassembly	0.69 US qt (0.65 L)
Recommended Transmission oil	API Service Classification SJ or higher except oils labeled as energy conserving or resource 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, or an equivalent motorcycle oil (without friction modifiers as molybdenum additives)	
Idle speed	2,100 ± 100 rpm	

■ Cooling system

Recommended coolant	Pro Honda HP Coolant	
Cooling capacity	After disassembly	0.80 US qt (0.76 L)

Drive train

Primary reduction		4.117
Gear ratio	1st	2.214
	2nd	1.647
	3rd	1.318
	4th	1.105
	5th	0.956
Final reduction	**CRF150R**	3.333
	CRF150RB	3.733
Gear shift pattern	Left foot-operated return system 1-N-2-3-4-5	

Electrical

Spark plug	Standard	CR8EH-9 (NGK) or U24FER9 (DENSO)
	For extended high speed riding	CR9EH-9 (NGK) or U27FER9 (DENSO)
Spark plug gap	0.03 - 0.04 in (0.8 - 0.9 mm)	

Torque specifications

Fork air pressure release screw	1.0 lbf·ft (1.3 N·m, 0.1 kgf·m)

Information Record

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

California Proposition 65 Warning

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

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