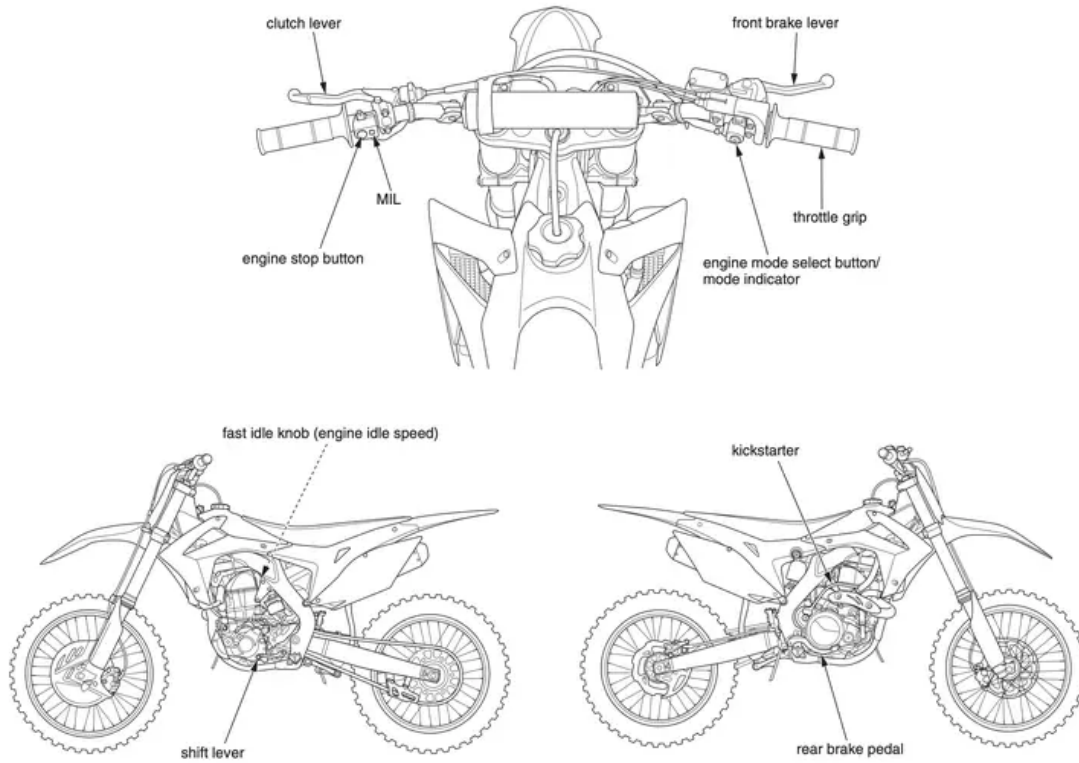


## Operation Component Locations



## Starting & Stopping the Engine

Always follow the proper starting procedure described below.

Your CRF can be kickstarted with the transmission in gear by pulling in the clutch lever before operating the kickstarter.

### Fast Idle Knob

The fast idle knob has two functions:

- When pulled out, the fast idle knob assists in first-time start-up for cold weather starting.
- When pushed in, it acts like an idle adjustment screw. Refer to Idle Speed Adjustment on page 60.

### Preparation

Make sure that the transmission is in neutral.

### Starting Procedure

Always follow the proper starting procedure described as follows.

Check the engine oil, transmission oil and coolant levels before starting the engine (pages 49, 52, 53).

### Cold Engine Starting

1. Shift the transmission into neutral.
2. If the temperature is 95°F (35°C) or below, pull the fast idle knob (1) fully out.  
[IMAGE]
3. With the throttle closed, operate the kickstarter starting from the top of the kickstarter stroke, kick through to the bottom with a rapid, continuous motion.
4. About a minute after the engine starts, push the fast idle knob back all the way to fully OFF. If idling is unstable, open the throttle slightly.

### Warm Engine Starting

1. Shift the transmission into neutral.
2. Kick-start the engine. (Do not open the throttle.)

### If Difficult to Start After Stalling

1. Shift the transmission into neutral.
2. With the throttle fully opened, repeat kickstarter operation approximately 10 times to discharge excessive fuel from the engine.
3. Kick-start the engine. (Do not open the throttle.)

Snapping the throttle or fast idling for more than about 5 minutes may cause exhaust pipe and muffler discolorations.

## **How to Stop the Engine**

### Normal Engine Stop

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

### Emergency Engine Stop

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

## **Is Your Motorcycle Ready to Ride?**

Competitive riding can be tough on a motorcycle, so it's important to inspect your CRF and correct any problems you find before each ride. Check the following items (page numbers are at the right):

**WARNING:** Improperly maintaining this motorcycle or failing to correct a problem before riding can cause a crash in which you can be seriously hurt or killed.

Always perform a pre-ride inspection before every ride and correct any problems.

## **Troubleshooting**

The items that are serviceable using this Manual are followed by the page number reference in parenthesis. The items that require use of an official Honda Service Manual are followed by an asterisk (\*).

### **ENGINE DOES NOT START OR IS HARD TO START CHECK**



CHECK		POSSIBLE CAUSES
Check the spark plug condition (P.66)	INCORRECT	<ul style="list-style-type: none"> <li>• Incorrect spark plug heat range</li> <li>• Incorrect spark plug gap</li> <li>• Dirty air cleaner element</li> </ul>
Try spark test*	WEAK OR NO SPARK	<ul style="list-style-type: none"> <li>• Faulty spark plug (P.66)</li> <li>• Fouled spark plug (P.66)</li> <li>• Faulty ECM*</li> <li>• Broken or shorted spark plug wire</li> <li>• Faulty alternator*</li> <li>• Faulty ignition coil*</li> <li>• Faulty engine stop button*</li> <li>• Loose or disconnected ignition system wires</li> <li>• Faulty CKP sensor*</li> <li>• Faulty regulator/rectifier*</li> <li>• Faulty condenser*</li> </ul>
Check the PGM-FI system (P.7)	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty PGM-FI system (P.9)</li> </ul>
Check the fuel pump operation and inspect the fuel flow*	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty fuel pump*</li> <li>• Clogged fuel pump filter (P.44)</li> </ul>
Check the fuel injector operating sound	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty PGM-FI system (P.9)</li> <li>• Faulty fuel injector</li> </ul>
Test cylinder compression*	LOW	<ul style="list-style-type: none"> <li>• Valve clearance too small</li> <li>• Valve stuck open</li> <li>• Worn cylinder and piston ring*</li> </ul>

CHECK		POSSIBLE CAUSES
		<ul style="list-style-type: none"> <li>• Damaged cylinder head gasket</li> <li>• Improper valve timing*</li> <li>• Seized valve</li> </ul>
Start by following normal starting procedure	ENGINE STARTS BUT SOON STOPS	<ul style="list-style-type: none"> <li>• Insulator leaking</li> <li>• Improper ignition timing (Faulty ECM or CKP sensor)*</li> <li>• Fast idle knob stuck open or damaged</li> <li>• Fuel contaminated</li> </ul>

**ENGINE LACKS POWER**



CHECK		POSSIBLE CAUSES
Check the wheel spin smoothness	INCORRECT	<ul style="list-style-type: none"> <li>• Brake dragging</li> <li>• Worn or damaged wheel bearings</li> <li>• Bent axle shaft</li> <li>• Drive chain too tight</li> </ul>
Check the tire pressure (p.93)	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty valve core</li> <li>• Punctured tire</li> </ul>
Check the engine speed change accordingly when clutch is engaged*	NO GOOD	<ul style="list-style-type: none"> <li>• Clutch slipping</li> <li>• Improperly adjusted clutch lever freeplay (p.61)</li> <li>• Worn clutch discs/plates (p. 64)</li> <li>• Warped clutch discs/ plates (p.64)</li> <li>• Weak clutch springs*</li> <li>• Sticking clutch lifter</li> <li>• Additive in engine oil</li> </ul>
Check the engine speed increase	NO GOOD	<ul style="list-style-type: none"> <li>• Dirty air cleaner element</li> <li>• Clogged muffler</li> <li>• Fast idle knob stuck open or damaged</li> <li>• Restricted fuel fill cap breather tube</li> <li>• Restricted fuel flow</li> </ul>
Check the engine knocking when accelerate or run the engine at high speed	YES	<ul style="list-style-type: none"> <li>• Worn piston and cylinder*</li> <li>• Use of poor quality fuel</li> <li>• Excessive carbon buildup in combustion chamber</li> </ul>

CHECK		POSSIBLE CAUSES
		<ul style="list-style-type: none"> <li>• Ignition timing too advance (Faulty ECM)*</li> <li>• Lean fuel mixture</li> </ul>
Check the ignition timing*	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty ECM*</li> <li>• Faulty CKP sensor*</li> </ul>
Test cylinder compression*	LOW	<ul style="list-style-type: none"> <li>• Valve clearance too small</li> <li>• Valve stuck open</li> <li>• Worn cylinder and piston ring*</li> <li>• Damaged cylinder head gasket</li> <li>• Improper valve timing*</li> <li>• Faulty decompressor system*</li> </ul>
Check the PGM-FI system (p.7)	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty PGM-FI system (p.9)</li> </ul>
Check the fuel pump operation and inspect the fuel flow*	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty fuel pump unit*</li> <li>• Clogged fuel pump filter (P. 44)</li> </ul>
Check the spark plug condition (p.66)	INCORRECT	<ul style="list-style-type: none"> <li>• Incorrect spark plug</li> <li>• Incorrect spark plug gap</li> <li>• Dirty air cleaner element</li> </ul>
Check the engine oil level and condition (p.49)	INCORRECT	<ul style="list-style-type: none"> <li>• Engine oil level too high</li> <li>• Engine oil level too low</li> <li>• Contaminated engine oil</li> </ul>
Remove the cylinder head cover and inspect lubrication	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty oil pump*</li> <li>• Faulty pressure relief valve*</li> </ul>

CHECK		POSSIBLE CAUSES
		<ul style="list-style-type: none"><li>• Clogged oil passage*</li><li>• Clogged oil strainer screen*</li></ul>

**POOR PERFORMANCE AT LOW AND IDLE SPEED**



CHECK		POSSIBLE CAUSES
Check the spark plug condition (P.66)	INCORRECT	<ul style="list-style-type: none"> <li>• Incorrect spark plug heat range</li> <li>• Incorrect spark plug gap</li> <li>• Plug not serviced frequently enough</li> </ul>
Check the ignition timing*	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty ECM*</li> <li>• Faulty CKP sensor*</li> </ul>
Check the PGM-FI system (P. 7)	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty PGM-FI system (P. 9)</li> </ul>
Check the fuel pump operation and inspect the fuel flow*	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty fuel pump unit*</li> <li>• Clogged fuel pump filter (P. 44)</li> </ul>
Check the insulator for leaks	INCORRECT	<ul style="list-style-type: none"> <li>• Loose insulator</li> <li>• Damaged insulator</li> </ul>
Check the valve clearance (P. 67)	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty valve clearance</li> <li>• Faulty valve*</li> <li>• Faulty valve seat*</li> <li>• Faulty camshaft*</li> </ul>
Try spark test*	WEAK OR INTERMITTENT SPARK	<ul style="list-style-type: none"> <li>• Faulty, carbon or wet fouled spark plug (P.66)</li> <li>• Faulty ECM*</li> <li>• Faulty alternator*</li> <li>• Faulty ignition coil*</li> <li>• Broken or shorted spark plug wire.</li> <li>• Faulty CKP sensor*</li> </ul>



CHECK		POSSIBLE CAUSES
		<ul style="list-style-type: none"> <li>• Loose or disconnected ignition system wires</li> <li>• Faulty engine stop button*</li> <li>• Faulty regulator/rectifier*</li> <li>• Faulty condenser*</li> </ul>

**POOR PERFORMANCE AT HIGH SPEED**



CHECK		POSSIBLE CAUSES
Check the ignition timing*	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty ECM*</li> <li>• Faulty CKP sensor*</li> </ul>
Remove the air cleaner (P.55)	DIRTY	<ul style="list-style-type: none"> <li>• Not cleaned frequently enough</li> </ul>
Check the PGM-FI system (P. 7)	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty PGM-FI system (P. 9)</li> </ul>
Check the fuel pump operation and inspect the fuel flow*	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty fuel pump unit*</li> <li>• Clogged fuel pump filter (P. 44)</li> </ul>
Check the valve timing	INCORRECT	<ul style="list-style-type: none"> <li>• Camshaft not installed properly (P.73)</li> </ul>
Check the valve clearance (P. 67)	INCORRECT	<ul style="list-style-type: none"> <li>• Faulty valve clearance</li> <li>• Faulty valve*</li> <li>• Faulty valve seat*</li> <li>• Faulty camshaft*</li> </ul>
Check the valve springs*	WEAR	<ul style="list-style-type: none"> <li>• Faulty valve springs*</li> </ul>
Try spark test*	WEAK OR INTERMITTENT SPARK	<ul style="list-style-type: none"> <li>• Faulty, carbon or wet fouled spark plug (P.66)</li> <li>• Faulty ECM*</li> <li>• Faulty alternator*</li> <li>• Faulty ignition coil*</li> <li>• Broken or shorted spark plug wire.</li> <li>• Faulty CKP sensor*</li> <li>• Loose or disconnected ignition system wires</li> </ul>

CHECK		POSSIBLE CAUSES
		<ul style="list-style-type: none"> <li>• Faulty engine stop button*</li> <li>• Faulty regulator/rectifier*</li> <li>• Faulty condenser*</li> </ul>
Remove and inspect the cam lobe height*	WORN	<ul style="list-style-type: none"> <li>• Faulty camshaft*</li> </ul>

## POOR HANDLING

### Steering is heavy

- Steering stem adjusting nut too tight\*
- Damaged steering head bearings
- Faulty HPSSD\*

### Either wheel is wobbling

- Excessive wheel bearing play
- Bent rim
- Improperly installed wheel hub
- Excessively worn swingarm pivot bearings
- Bent frame

### The motorcycle pulls to one side

- Front and rear wheels not aligned
- Bent fork
- Bent swingarm
- Bent axle shaft
- Bent frame

#### Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.