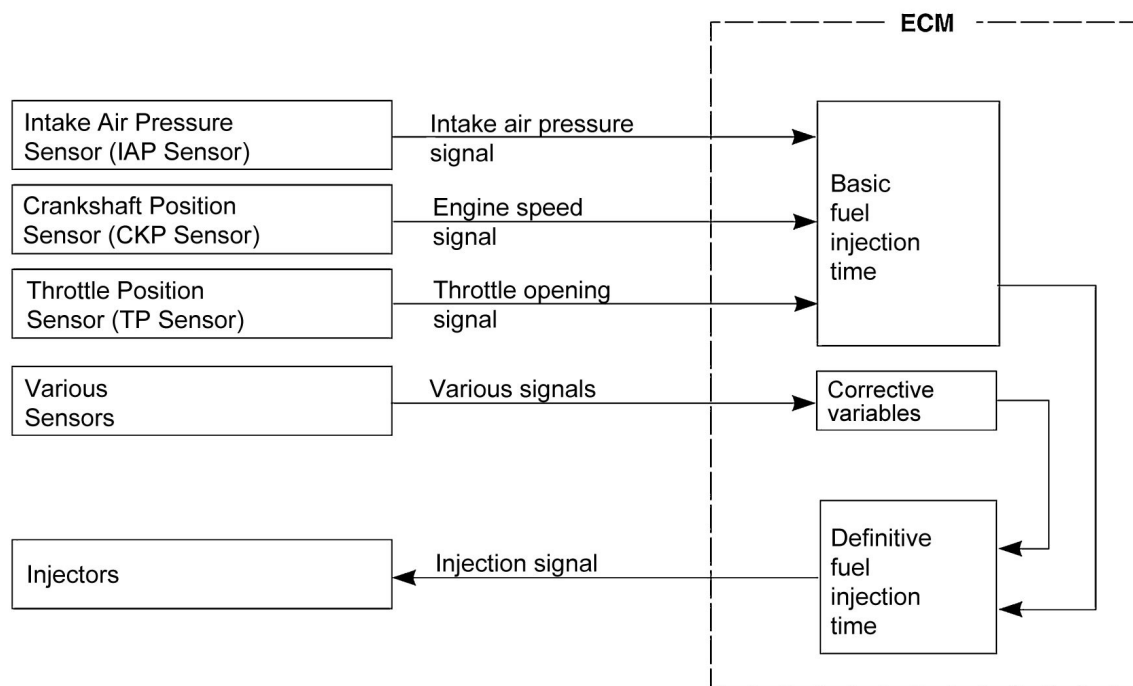




## Injection Timing Description

### Injection Time (Injection Volume)

The factors to determine the injection time include the basic fuel injection time, which is calculated on the basis of the intake air pressure, engine speed and throttle opening angle, and various compensations. These compensations are determined according to the signals from various sensors that detect the engine and driving conditions.



### Compensation of Injection Time (Volume)

The following different signals are output from the respective sensors for compensation of the fuel injection time (volume).

Signal	Descriptions
Atmospheric pressure sensor signal	When atmospheric pressure is low, the sensor sends the signal to the ECM and reduce the injection time (volume).
ECT sensor signal	When engine coolant temperature is low, injection time (volume) is increased.
IAT sensor signal	When intake air temperature is low, injection time (volume) is increased.
HO2 sensor signal	Air/fuel ratio is compensated to the theoretical ratio from density of oxygen in exhaust gasses. The compensation occurs in such a way that more fuel is supplied if detected air/fuel ratio is lean and less fuel is supplied if it is rich.
Battery voltage signal	ECM operates on the battery voltage and at the same time, it monitors the voltage signal for compensation of the fuel injection time (volume). A longer injection time is needed to adjust injection volume in the case of low voltage.
Engine rpm signal	At high speed, the injection time (volume) is increased.
Starting signal	When starting engine, additional fuel is injected during cranking engine.

Acceleration signal / deceleration signal	During acceleration, the fuel injection time (volume) is increased, in accordance with the throttle opening speed and engine rpm. During deceleration, the fuel injection time (volume) is decreased.
-------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## Injection Stop Control

Signal	Descriptions
TO sensor signal	When the motorcycle tips over, the tip-over sensor sends a signal to the ECM. Then, this signal cuts OFF current supplied to the fuel pump, fuel injectors and ignition coils.
Over-rev. limiter signal	When actual engine speed reaches a programmed maximum, the fuel injection pulses are suppressed.