

## Forklift Throttle Body

Where fuel injected engines are concerned, the throttle body is the part of the air intake system that regulates the amount of air that flows into the engine. This mechanism functions in response to operator accelerator pedal input in the main. Usually, the throttle body is situated between the intake manifold and the air filter box. It is often fixed to or positioned close to the mass airflow sensor. The largest part within the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main task is so as to regulate air flow.

On many styles of automobiles, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages that in turn move the throttle plate. In vehicles consisting of electronic throttle control, likewise known as "drive-by-wire" an electric motor regulates the throttle linkages. The accelerator pedal is attached to a sensor and not to the throttle body. This particular sensor sends the pedal position to the ECU or otherwise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position together with inputs from other engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached to the black part on the left hand side which is curved in design. The copper coil situated next to this is what returns the throttle body to its idle position after the pedal is released.

The throttle plate revolves in the throttle body each and every time the driver applies pressure on the accelerator pedal. This opens the throttle passage and allows more air to be able to flow into the intake manifold. Typically, an airflow sensor measures this alteration and communicates with the ECU. In response, the Engine Control Unit then increases the amount of fluid being sent to the fuel injectors in order to generate the desired air-fuel ratio. Generally a throttle position sensor or otherwise called TPS is attached to the shaft of the throttle plate to provide the ECU with information on whether the throttle is in the wide-open throttle or also called "WOT" position, the idle position or somewhere in between these two extremes.

Various throttle bodies can have valves and adjustments to be able to control the minimum airflow all through the idle period. Even in units which are not "drive-by-wire" there will normally be a small electric motor driven valve, the Idle Air Control Valve or IACV that the ECU uses to regulate the amount of air that can bypass the main throttle opening.

In a lot of cars it is common for them to have a single throttle body. So as to improve throttle response, more than one can be used and connected together by linkages. High performance vehicles such as the BMW M1, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are referred to as ITBs or otherwise known as "individual throttle bodies."

A throttle body is like the carburetor in a non-injected engine. Carburetors combine the functionality of the fuel injectors and the throttle body together. They function by combining the air and fuel together and by regulating the amount of air flow. Automobiles which have throttle body injection, which is known as CFI by Ford and TBI by GM, locate the fuel injectors within the throttle body. This enables an older engine the opportunity to be converted from carburetor to fuel injection without really altering the design of the engine.