

## Throttle Body for Forklift

Forklift Throttle Body - The throttle body is part of the intake control system in fuel injected engines in order to control the amount of air flow to the engine. This mechanism operates by putting pressure on the driver accelerator pedal input. Generally, the throttle body is positioned between the air filter box and the intake manifold. It is usually attached to or placed near the mass airflow sensor. The biggest piece inside the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is to regulate air flow.

On many styles of cars, the accelerator pedal motion is communicated via the throttle cable. This activates the throttle linkages which in turn move the throttle plate. In automobiles with electronic throttle control, also 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 Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position along with inputs from different engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached to the black portion on the left hand side which is curved in design. The copper coil placed close to this is what returns the throttle body to its idle position as soon as the pedal is released.

The throttle plate revolves inside the throttle body each time the driver presses on the accelerator pedal. This opens the throttle passage and permits more air to be able to flow into the intake manifold. Usually, 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 so as to produce the desired air-fuel ratio. Often a throttle position sensor or likewise called TPS is connected to the shaft of the throttle plate to provide the ECU with information on whether the throttle is in the idle position, the wide-open position or likewise called "WOT" position or anywhere in between these two extremes.

Various throttle bodies may include adjustments and valves in order to control the minimum airflow during the idle period. Even in units which are not "drive-by-wire" there would usually be a small electric motor driven valve, the Idle Air Control Valve or likewise called IACV that the ECU utilizes to control the amount of air that could bypass the main throttle opening.

It is common that lots of vehicles have one throttle body, although, more than one can be used and attached together by linkages so as to improve throttle response. High performance automobiles such as the BMW M1, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for each cylinder. These models are called ITBs or otherwise known as "individual throttle bodies."

The carburetor and the throttle body in a non-injected engine are quite the same. The carburetor combines the functionality of both the fuel injectors and the throttle body together. They can regulate the amount of air flow and blend the fuel and air together. Cars which include throttle body injection, which is called CFI by Ford and TBI by GM, put the fuel injectors in the throttle body. This permits an old engine the chance to be transformed from carburetor to fuel injection without really altering the design of the engine.