

## Forklift Throttle Body

Forklift Throttle Body - The throttle body is part of the intake control system in fuel injected engines to be able to regulate the amount of air flow to the engine. This mechanism operates by placing pressure upon the driver accelerator pedal input. Generally, the throttle body is positioned between the intake manifold and the air filter box. It is usually connected to or situated next to the mass airflow sensor. The biggest part in the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is to be able to control air flow.

On nearly all cars, the accelerator pedal motion is transferred via the throttle cable, therefore activating the throttle linkages works to be able to move the throttle plate. In automobiles with electronic throttle control, otherwise called "drive-by-wire" an electric motor regulates the throttle linkages. The accelerator pedal connects 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 upon accelerator pedal position together with inputs from other engine sensors. The throttle body has a throttle position sensor. The throttle cable connects to the black part on the left hand side which is curved in design. The copper coil positioned next to this is what returns the throttle body to its idle position once the pedal is released.

The throttle plate rotates in the throttle body each time the driver presses on the accelerator pedal. This opens the throttle passage and allows a lot more air to flow into the intake manifold. Normally, an airflow sensor measures this adjustment and communicates with the ECU. In response, the Engine Control Unit then increases the amount of fluid being sent to the fuel injectors to be able to generate the desired air-fuel ratio. Frequently a throttle position sensor or otherwise called TPS is fixed 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 also called "WOT" position or anywhere in between these two extremes.

Several throttle bodies may include adjustments and valves so as to control the least amount of airflow 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 also called IACV which the ECU utilizes to be able to control the amount of air which can bypass the main throttle opening.

In many automobiles it is common for them to contain a single throttle body. To be able to improve throttle response, more than one can be used and connected together by linkages. High performance vehicles like for example the BMW M1, along with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are called ITBs or likewise known as "individual throttle bodies."

The carburetor and the throttle body in a non-injected engine are somewhat similar. The carburetor combines the functionality of both the fuel injectors and the throttle body into one. They are able to control the amount of air flow and combine the fuel and air together. Cars which include throttle body injection, that is referred to as CFI by Ford and TBI by GM, locate the fuel injectors within the throttle body. This permits an old engine the chance to be converted from carburetor to fuel injection without really changing the design of the engine.