

## Forklift Throttle Body

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the component of the air intake system that regulates the amount of air which flows into the engine. This particular mechanism functions in response to driver accelerator pedal input in the main. Usually, the throttle body is positioned between the intake manifold and the air filter box. It is usually fixed to or positioned near the mass airflow sensor. The biggest part within the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is in order to control air flow.

On nearly all automobiles, the accelerator pedal motion is transferred through the throttle cable, therefore activating the throttle linkages works so as to move the throttle plate. In cars with electronic throttle control, likewise referred to as "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 on accelerator pedal position together with inputs from various engine sensors. The throttle body has a throttle position sensor. The throttle cable connects to the black portion 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 after the pedal is released.

The throttle plate rotates in the throttle body each and every time the driver applies pressure on the accelerator pedal. This opens the throttle passage and permits a lot more air to flow into the intake manifold. Usually, an airflow sensor measures this change 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. Generally a throttle position sensor or likewise called TPS is connected to the shaft of the throttle plate to be able to provide the ECU with information on whether the throttle is in the wide-open throttle or otherwise called "WOT" position, the idle position or somewhere in between these two extremes.

Several throttle bodies can have adjustments and valves so as to control the minimum airflow throughout the idle period. Even in units that are not "drive-by-wire" there will 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 which can bypass the main throttle opening.

It is common that a lot of vehicles contain one throttle body, even though, more than one can be utilized and connected together by linkages so as to improve throttle response. High performance vehicles like the BMW M1, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are called ITBs or likewise known as "individual throttle bodies."

The throttle body and the carburetor in a non-injected engine are somewhat similar. The carburetor combines the functionality of both the fuel injectors and the throttle body together. They can control the amount of air flow and blend the air and fuel together. Vehicles which have throttle body injection, that is referred to as CFI by Ford and TBI by GM, locate the fuel injectors inside the throttle body. This allows an older engine the possibility to be converted from carburetor to fuel injection without really altering the engine design.