## Forklift Throttle Body

Forklift Throttle Body - The throttle body is part of the intake control system in fuel injected engines so as to regulate the amount of air flow to the engine. This mechanism operates by placing pressure on the operator accelerator pedal input. Usually, the throttle body is placed between the air filter box and the intake manifold. It is normally connected to or placed next to the mass airflow sensor. The biggest component within the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is in order to control air flow.

On most automobiles, the accelerator pedal motion is transferred through the throttle cable, hence activating the throttle linkages works to move the throttle plate. In vehicles consisting of electronic throttle control, otherwise called "drive-by-wire" an electric motor controls the throttle linkages. The accelerator pedal is attached to a sensor and not to the throttle body. This sensor sends the pedal position to the ECU or Engine Control Unit. The ECU is responsible for determining the throttle opening based upon accelerator pedal position along with inputs from other engine sensors. The throttle body has a throttle position sensor. The throttle cable connects to the black portion on the left hand side that is curved in design. The copper coil placed close 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 operator applies pressure on the accelerator pedal. This opens the throttle passage and allows 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 in order to produce the desired air-fuel ratio. Often a throttle position sensor or likewise called TPS is fixed to the shaft of the throttle plate to be able 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.

In order to control the lowest amount of air flow while idling, various throttle bodies could have adjustments and valves. Even in units that are not "drive-by-wire" there would normally be a small electric motor driven valve, the Idle Air Control Valve or IACV which the ECU uses in order to regulate the amount of air that could bypass the main throttle opening.

In numerous vehicles it is normal for them to have one throttle body. To be able to improve throttle response, more than one could be utilized and connected together by linkages. High performance automobiles like the BMW M1, together with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are referred to as ITBs or "individual throttle bodies."

A throttle body is similar to the carburetor in a non-injected engine. Carburetors combine the functionality of the throttle body and the fuel injectors into one. They function by mixing the air and fuel together and by regulating the amount of air flow. Automobiles which include throttle body injection, that is referred to as TBI by GM and CFI by Ford, locate the fuel injectors in the throttle body. This enables an old engine the chance to be transformed from carburetor to fuel injection without significantly altering the engine design.