

## Throttle Body for Forklifts

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the part of the air intake system which regulates the amount of air that flows into the engine. This particular mechanism works in response to operator accelerator pedal input in the main. Usually, the throttle body is situated between the air filter box and the intake manifold. It is often fixed to or placed next 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 to be able to control air flow.

On numerous styles of vehicles, the accelerator pedal motion is communicated via the throttle cable. This activates the throttle linkages which in turn move the throttle plate. In vehicles with electronic throttle control, likewise 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 particular sensor sends the pedal position to the ECU or also known as Engine Control Unit. The ECU is responsible for determining the throttle opening based upon 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 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 as soon as the pedal is released.

The throttle plate turns inside the throttle body each time the operator applies pressure on the accelerator pedal. This opens the throttle passage and enables much 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 to be able to generate the desired air-fuel ratio. Often a throttle position sensor or TPS is fixed to the shaft of the throttle plate so as to provide the ECU with information on whether the throttle is in the idle position, the wide-open position or "WOT" position or somewhere in between these two extremes.

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

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

The throttle body and the carburetor in a non-injected engine are rather similar. The carburetor combines the functionality of both the fuel injectors and the throttle body into one. They can control the amount of air flow and blend the air and fuel together. Cars which have throttle body injection, which is known as TBI by GM and CFI by Ford, locate the fuel injectors in the throttle body. This enables an older engine the chance to be converted from carburetor to fuel injection without really changing the engine design.