

## 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 controls the amount of air which flows into the motor. This particular mechanism functions in response to operator accelerator pedal input in the main. Usually, the throttle body is located between the air filter box and the intake manifold. It is usually connected to or placed next to the mass airflow sensor. The largest piece in the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main task is in order to control air flow.

On nearly all vehicles, the accelerator pedal motion is transferred via the throttle cable, therefore activating the throttle linkages works to move the throttle plate. In vehicles with electronic throttle control, otherwise referred to 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 likewise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position together with inputs from different 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 close to this is what returns the throttle body to its idle position once the pedal is released.

The throttle plate revolves within the throttle body each time the operator presses on the accelerator pedal. This opens the throttle passage and allows 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 in order to generate the desired air-fuel ratio. Frequently a throttle position sensor or TPS is attached 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 anywhere in between these two extremes.

So as to regulate the lowest amount of air flow while idling, some throttle bodies can have valves and adjustments. Even in units which are not "drive-by-wire" there will often be a small electric motor driven valve, the Idle Air Control Valve or IACV which the ECU utilizes to be able to control the amount of air which could bypass the main throttle opening.

In numerous automobiles it is normal for them to have a single throttle body. In order to improve throttle response, more than one could be utilized and attached together by linkages. High performance vehicles like the BMW M1, along with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for each cylinder. These models are referred to as ITBs or likewise known as "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 work by mixing the air and fuel together and by controlling the amount of air flow. Cars which have throttle body injection, which is referred to as TBI by GM and CFI by Ford, put the fuel injectors inside the throttle body. This allows an old engine the chance to be converted from carburetor to fuel injection without significantly altering the design of the engine.