

## Throttle Body for Forklift

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 which flows into the engine. This mechanism operates in response to driver accelerator pedal input in the main. Usually, the throttle body is placed between the intake manifold and the air filter box. It is normally fixed to or placed near the mass airflow sensor. The largest piece in the throttle body is a butterfly valve called the throttle plate. The throttle plate's main function is to be able to regulate air flow.

On nearly all cars, the accelerator pedal motion is transferred through the throttle cable, thus activating the throttle linkages works to be able to move the throttle plate. In automobiles with electronic throttle control, likewise referred to as "drive-by-wire" an electric motor controls 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 likewise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position along with inputs from various engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached to the black portion on the left hand side which is curved in design. The copper coil placed close to this is what returns the throttle body to its idle position as soon as the pedal is released.

The throttle plate turns in the throttle body every time the driver applies pressure 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 change and communicates with the ECU. In response, the Engine Control Unit then increases the amount of fluid being sent to the fuel injectors so as to produce the desired air-fuel ratio. Generally a throttle position sensor or TPS is fixed to the shaft of the throttle plate in order to provide the ECU with information on whether the throttle is in the idle position, the wide-open position or otherwise called "WOT" position or anywhere in between these two extremes.

To be able to control the minimum air flow while idling, several throttle bodies can include adjustments and valves. Even in units which are not "drive-by-wire" there will usually be a small electric motor driven valve, the Idle Air Control Valve or IACV that the ECU utilizes so as to regulate the amount of air which can bypass the main throttle opening.

In lots of automobiles it is normal for them to have one throttle body. So as to improve throttle response, more than one could be utilized and attached together by linkages. High performance vehicles such as 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 "individual throttle bodies."

The carburetor and the throttle body in a non-injected engine are quite the same. The carburetor combines the functionality of both the throttle body and the fuel injectors together. They are able to regulate the amount of air flow and blend the fuel and air together. Vehicles that include throttle body injection, which is referred to as CFI by Ford and TBI by GM, locate the fuel injectors in the throttle body. This enables an older engine the chance to be converted from carburetor to fuel injection without significantly changing the design of the engine.