

## Forklift Throttle Body

Forklift Throttle Body - The throttle body is a component of the intake control system in fuel injected engines so as to regulate the amount of air flow to the engine. This particular mechanism works by putting pressure upon the driver accelerator pedal input. Generally, the throttle body is situated between the intake manifold and the air filter box. It is usually fixed to or located next to the mass airflow sensor. The largest component within the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main task is in order to control air flow.

On many kinds of automobiles, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages that in turn move the throttle plate. In cars consisting of electronic throttle control, also known 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 otherwise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position along with inputs from different engine sensors. The throttle body has 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 next to this is what returns the throttle body to its idle position once the pedal is released.

The throttle plate turns inside the throttle body each and every time the operator presses on the accelerator pedal. This opens the throttle passage and enables more air to flow into the intake manifold. Normally, 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 produce the desired air-fuel ratio. Generally a throttle position sensor or also called TPS is fixed to the shaft of the throttle plate 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 lowest amount of air flow while idling, some 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 uses to be able to control the amount of air that could bypass the main throttle opening.

It is common that a lot of vehicles contain a single throttle body, even though, more than one could be utilized and attached together by linkages so as to improve throttle response. High performance automobiles like for example 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 otherwise 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 together. They operate by combining the fuel and air together and by modulating the amount of air flow. Automobiles which include throttle body injection, that is known as TBI by GM and CFI by Ford, put the fuel injectors within the throttle body. This permits an old engine the opportunity to be converted from carburetor to fuel injection without significantly changing the engine design.