

## Forklift Throttle Body

Throttle Body for Forklifts - The throttle body is a component of the intake control system in fuel injected engines in order to regulate the amount of air flow to the engine. This mechanism works by applying pressure on the operator accelerator pedal input. Generally, the throttle body is located between the air filter box and the intake manifold. It is usually connected to or located near the mass airflow sensor. The biggest part inside the throttle body is a butterfly valve called the throttle plate. The throttle plate's main function is so as to control air flow.

On most automobiles, the accelerator pedal motion is transferred through the throttle cable, therefore activating the throttle linkages works in order to move the throttle plate. In cars with electronic throttle control, also called "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 also known as Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position along with inputs from other engine sensors. The throttle body has a throttle position sensor. The throttle cable is attached to the black part on the left hand side that is curved in design. The copper coil located next to this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates revolve inside the throttle body each and every time pressure is applied on the accelerator. The throttle passage is then opened so as to permit 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 to be able to generate the desired air-fuel ratio. Often a throttle position sensor or likewise called TPS is connected 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 somewhere in between these two extremes.

Several throttle bodies can include valves and adjustments so as to control the lowest amount of airflow through the idle period. 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 otherwise called IACV that the ECU uses in order to regulate the amount of air that can bypass the main throttle opening.

In various vehicles it is normal for them to contain one throttle body. In order to improve throttle response, more than one could be used and attached together by linkages. 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 and every 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 fuel injectors and the throttle body together. They function by mixing the fuel and air together and by regulating the amount of air flow. Cars which have throttle body injection, that is known as CFI by Ford and TBI by GM, situate the fuel injectors in the throttle body. This permits an old engine the possibility to be transformed from carburetor to fuel injection without considerably changing the engine design.