

## Forklift Throttle Body

Forklift Throttle Body - 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 particular mechanism works by placing pressure upon the operator accelerator pedal input. Usually, the throttle body is located between the air filter box and the intake manifold. It is often attached to or placed close to the mass airflow sensor. The biggest component within the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is to be able to regulate air flow.

On the majority of automobiles, the accelerator pedal motion is transferred through the throttle cable, thus activating the throttle linkages works in order to move the throttle plate. In automobiles with electronic throttle control, otherwise 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 sensor sends the pedal position to the ECU or 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 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 situated next to this is what returns the throttle body to its idle position after the pedal is released.

The throttle plate revolves in the throttle body each and every time the driver applies pressure on the accelerator pedal. This opens the throttle passage and enables 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 likewise called TPS is connected to the shaft of the throttle plate in order to provide the ECU with information on whether the throttle is in the wide-open throttle or likewise called "WOT" position, the idle position or anywhere in between these two extremes.

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

In several automobiles it is normal for them to have one throttle body. In order to improve throttle response, more than one can be used and connected together by linkages. High performance automobiles like the BMW M1, along with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are called ITBs or also known as "individual throttle bodies."

The carburetor and the throttle body in a non-injected engine are rather the same. The carburetor combines the functionality of both the fuel injectors and the throttle body into one. They could regulate the amount of air flow and blend the fuel and air together. Vehicles that include throttle body injection, which is called TBI by GM and CFI by Ford, situate the fuel injectors inside the throttle body. This allows an old engine the chance to be converted from carburetor to fuel injection without really changing the design of the engine.