

## Forklift Throttle Body

Forklift Throttle Body - The throttle body is a component of the intake control system in fuel injected engines to be able to control the amount of air flow to the engine. This mechanism functions by applying pressure on the operator accelerator pedal input. Normally, the throttle body is placed between the intake manifold and the air filter box. It is usually attached to or situated next to the mass airflow sensor. The biggest component within the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is in order to control air flow.

On most automobiles, the accelerator pedal motion is transferred through the throttle cable, thus activating the throttle linkages works so as to move the throttle plate. In automobiles consisting of 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 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 upon 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 that is curved in design. The copper coil located close to this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates revolve inside the throttle body every time pressure is placed on the accelerator. The throttle passage is then opened to permit much more air to flow into the intake manifold. Usually, an airflow sensor measures this adjustment 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. Generally a throttle position sensor or also called TPS is connected 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 "WOT" position or anywhere in between these two extremes.

So as to regulate the minimum air flow while idling, some throttle bodies could have valves and adjustments. 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 in order to control the amount of air which can bypass the main throttle opening.

In several vehicles it is normal for them to contain a single 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, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are referred to as ITBs or otherwise known as "individual throttle bodies."

The carburator and the throttle body in a non-injected engine are quite similar. The carburator combines the functionality of both the fuel injectors and the throttle body together. They could regulate the amount of air flow and blend the air and fuel together. Cars which have throttle body injection, that is referred to as CFI by Ford and TBI by GM, locate the fuel injectors within the throttle body. This enables an old engine the opportunity to be transformed from carburetor to fuel injection without really changing the engine design.