

## Forklift Throttle Body

Forklift Throttle Body - The throttle body is part of the intake control system in fuel injected engines to control the amount of air flow to the engine. This particular mechanism functions 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 attached to or located close to the mass airflow sensor. The biggest component inside the throttle body is a butterfly valve called the throttle plate. The throttle plate's main function is to regulate air flow.

On the majority of cars, the accelerator pedal motion is transferred via the throttle cable, therefore activating the throttle linkages works in order to move the throttle plate. In cars with electronic throttle control, likewise known as "drive-by-wire" an electric motor controls the throttle linkages. The accelerator pedal is attached to a sensor and not to the throttle body. This 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 upon accelerator pedal position together with inputs from various engine sensors. The throttle body consists of a throttle position sensor. The throttle cable connects 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 rotate in the throttle body each and every time pressure is placed on the accelerator. The throttle passage is then opened in order to permit 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 generate the desired air-fuel ratio. Frequently a throttle position sensor or likewise called TPS is attached to the shaft of the throttle plate to provide the ECU with information on whether the throttle is in the wide-open throttle or "WOT" position, the idle position or anywhere in between these two extremes.

Some throttle bodies can include valves and adjustments in order to regulate the minimum airflow during the idle period. Even in units that are not "drive-by-wire" there would normally be a small electric motor driven valve, the Idle Air Control Valve or also called IACV which the ECU uses so as to regulate the amount of air which can bypass the main throttle opening.

In several cars it is normal for them to contain a single throttle body. To be able to improve throttle response, more than one can be used and attached together by linkages. High performance cars like the BMW M1, together with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are called ITBs or likewise known as "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 fuel injectors and the throttle body into one. They can control the amount of air flow and combine the air and fuel together. Automobiles that have throttle body injection, which is called CFI by Ford and TBI by GM, put the fuel injectors inside the throttle body. This allows an old engine the opportunity to be transformed from carburetor to fuel injection without really altering the design of the engine.