

## Throttle Body for Forklift

Throttle Body for Forklift - Where fuel injected engines are concerned, the throttle body is the component of the air intake system that regulates the amount of air which flows into the engine. This mechanism operates in response to driver accelerator pedal input in the main. Usually, the throttle body is placed between the intake manifold and the air filter box. It is often attached to or placed near the mass airflow sensor. The largest component inside the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is to control air flow.

On most automobiles, the accelerator pedal motion is transferred through the throttle cable, thus activating the throttle linkages works to be able to move the throttle plate. In vehicles consisting of electronic throttle control, also known as "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 likewise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based upon accelerator pedal position together with inputs from different 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 near this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates revolve within the throttle body every time pressure is placed on the accelerator. The throttle passage is then opened to enable much 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 produce the desired air-fuel ratio. Frequently a throttle position sensor or TPS is attached 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 also called "WOT" position or anywhere in between these two extremes.

Some throttle bodies may have valves and adjustments in order to control the lowest amount of airflow through the idle period. Even in units that are not "drive-by-wire" there will often be a small electric motor driven valve, the Idle Air Control Valve or also called IACV which the ECU utilizes to be able to control the amount of air which can bypass the main throttle opening.

It is common that various cars contain a single throttle body, though, more than one could be utilized and attached together by linkages in order to improve throttle response. High performance cars like 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 also known as "individual throttle bodies."

The throttle body and the carburetor in a non-injected engine are rather similar. The carburetor combines the functionality of both the throttle body and the fuel injectors into one. They could modulate the amount of air flow and blend the fuel and air together. Cars that include throttle body injection, that is known as TBI by GM and CFI by Ford, locate the fuel injectors inside the throttle body. This enables an old engine the opportunity to be transformed from carburetor to fuel injection without significantly altering the engine design.