

Forklift Throttle Body

Throttle Body for Forklifts - Where fuel injected engines are concerned, the throttle body is the component of the air intake system which controls the amount of air that flows into the engine. This mechanism functions in response to driver accelerator pedal input in the main. Normally, the throttle body is located between the air filter box and the intake manifold. It is often attached to or located next to the mass airflow sensor. The biggest component in the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is so as to control air flow.

On several styles of automobiles, the accelerator pedal motion is communicated via the throttle cable. This activates the throttle linkages that in turn move the throttle plate. In cars consisting of 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 particular sensor sends the pedal position to the ECU or otherwise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position along with inputs from different engine sensors. The throttle body has 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.

The throttle plate turns in the throttle body every time the driver applies pressure on the accelerator pedal. This opens the throttle passage and enables 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 to be able to produce 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 likewise called "WOT" position or anywhere in between these two extremes.

Various throttle bodies may include valves and adjustments so as to regulate the least amount of airflow during the idle period. Even in units which are not "drive-by-wire" there will usually be a small electric motor driven valve, the Idle Air Control Valve or IACV which the ECU uses so as to regulate the amount of air which could bypass the main throttle opening.

In many vehicles it is normal for them to have a single throttle body. To be able to improve throttle response, more than one can be used and connected together by linkages. High performance automobiles like for instance the BMW M1, together with high performance motorcycles like for instance 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 quite similar. The carburetor combines the functionality of both the throttle body and the fuel injectors into one. They are able to regulate the amount of air flow and combine the air and fuel together. Vehicles which include throttle body injection, that is referred to as TBI by GM and CFI by Ford, locate the fuel injectors within the throttle body. This enables an old engine the opportunity to be converted from carburetor to fuel injection without really altering the design of the engine.