

Throttle Body for Forklift

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the part of the air intake system that regulates the amount of air that flows into the motor. This mechanism operates in response to driver accelerator pedal input in the main. Usually, the throttle body is located between the intake manifold and the air filter box. It is usually connected to or placed close to the mass airflow sensor. The largest part within the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is so as to control air flow.

On many kinds of automobiles, the accelerator pedal motion is communicated via the throttle cable. This activates the throttle linkages which in turn move the throttle plate. In cars consisting of electronic throttle control, also 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 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 on accelerator pedal position along with inputs from other engine sensors. The throttle body consists of a throttle position sensor. The throttle cable connects to the black part 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 as soon as the pedal is released.

The throttle plate rotates in the throttle body each and 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. Typically, 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 produce the desired air-fuel ratio. Frequently a throttle position sensor or also 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 somewhere in between these two extremes.

Several throttle bodies may have valves and adjustments to be able to regulate the least amount of airflow throughout the idle period. Even in units which are not "drive-by-wire" there would often be a small electric motor driven valve, the Idle Air Control Valve or IACV that the ECU uses to regulate the amount of air which could bypass the main throttle opening.

In various cars it is common for them to have a single throttle body. In order to improve throttle response, more than one could be utilized and connected together by linkages. High performance cars like the BMW M1, along with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for each 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 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 mix the air and fuel together. Vehicles which have throttle body injection, that is known as CFI by Ford and TBI by GM, situate the fuel injectors in the throttle body. This permits an older engine the opportunity to be converted from carburetor to fuel injection without really changing the engine design.