

Throttle Body for Forklifts

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the component of the air intake system which controls the amount of air which flows into the engine. This particular mechanism works in response to operator accelerator pedal input in the main. Generally, the throttle body is located between the intake manifold and the air filter box. It is often connected to or located near the mass airflow sensor. The largest piece in the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main task is so as to control air flow.

On most vehicles, the accelerator pedal motion is transferred through the throttle cable, therefore activating the throttle linkages works to be able to move the throttle plate. In automobiles consisting of electronic throttle control, likewise called "drive-by-wire" an electric motor regulates 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 also 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 which is curved in design. The copper coil situated close to this is what returns the throttle body to its idle position once the pedal is released.

The throttle plate turns within the throttle body every time the operator presses on the accelerator pedal. This opens the throttle passage and permits much 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 TPS is fixed 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 otherwise called "WOT" position or anywhere in between these two extremes.

Various throttle bodies could include valves and adjustments so as to regulate the lowest amount of airflow throughout 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 that the ECU utilizes so as to control the amount of air which can bypass the main throttle opening.

In various cars it is normal for them to have one throttle body. So as to improve throttle response, more than one can be utilized and connected together by linkages. High performance cars like for example the BMW M1, together 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 otherwise 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 together. They could control the amount of air flow and mix the air and fuel together. Automobiles which include throttle body injection, which is referred to as TBI by GM and CFI by Ford, situate the fuel injectors within the throttle body. This permits an older engine the opportunity to be transformed from carburetor to fuel injection without really altering the design of the engine.