

Forklift Throttle Body

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

On the majority of automobiles, the accelerator pedal motion is transferred through the throttle cable, thus activating the throttle linkages works 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 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 upon accelerator pedal position together with inputs from various engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached to the black part on the left hand side that is curved in design. The copper coil located next to this is what returns the throttle body to its idle position as soon as the pedal is released.

The throttle plate rotates within the throttle body every time the operator applies pressure on the accelerator pedal. This opens the throttle passage and permits a lot more air to flow into the intake manifold. Usually, an airflow sensor measures this alteration 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. Often a throttle position sensor or likewise called TPS is fixed to the shaft of the throttle plate so as to provide the ECU with information on whether the throttle is in the wide-open throttle or likewise called "WOT" position, the idle position or anywhere in between these two extremes.

So as to regulate the least amount of air flow while idling, some throttle bodies could have adjustments and valves. Even in units which are not "drive-by-wire" there would normally be a small electric motor driven valve, the Idle Air Control Valve or otherwise called IACV that the ECU uses so as to control the amount of air that can bypass the main throttle opening.

In many cars it is normal for them to contain one throttle body. To be able to improve throttle response, more than one can be utilized and connected together by linkages. High performance vehicles like for example the BMW M1, together with high performance motorcycles like for example the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are called ITBs or also known as "individual throttle bodies."

The throttle body and the carburetor in a non-injected engine are rather the same. The carburetor combines the functionality of both the throttle body and the fuel injectors together. They are able to regulate the amount of air flow and blend the air and fuel together. Automobiles that have throttle body injection, that is known as TBI by GM and CFI by Ford, put the fuel injectors within the throttle body. This allows an old engine the possibility to be converted from carburetor to fuel injection without considerably altering the engine design.