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 works 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 usually fixed to or situated close to the mass airflow sensor. The biggest part in the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is to regulate air flow.

On several kinds of vehicles, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages which in turn move the throttle plate. In cars with electronic throttle control, otherwise known as "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 Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position together with inputs from other engine sensors. The throttle body consists of a throttle position sensor. The throttle cable connects to the black portion on the left hand side that is curved in design. The copper coil situated close to this is what returns the throttle body to its idle position after the pedal is released.

Throttle plates revolve inside the throttle body each and every time pressure is placed on the accelerator. The throttle passage is then opened to enable a lot more air to flow into the intake manifold. Usually, 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 generate the desired air-fuel ratio. Frequently a throttle position sensor or likewise 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 otherwise called "WOT" position or somewhere in between these two extremes.

In order to control the minimum air flow while idling, several throttle bodies can have adjustments and valves. 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 likewise called IACV that the ECU utilizes so as to control the amount of air which can bypass the main throttle opening.

It is common that many vehicles contain one throttle body, even though, more than one could be utilized and connected together by linkages to be able to improve throttle response. High performance automobiles like the BMW M1, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for each cylinder. These models are called ITBs or also known as "individual throttle bodies."

A throttle body is similar to the carburetor in a non-injected engine. Carburetors combine the functionality of the fuel injectors and the throttle body into one. They work by combining the air and fuel together and by regulating the amount of air flow. Vehicles which have throttle body injection, that is called TBI by GM and CFI by Ford, locate the fuel injectors inside the throttle body. This permits an old engine the opportunity to be converted from carburetor to fuel injection without considerably changing the design of the engine.