Throttle Body for Forklift

Throttle Body for Forklift - The throttle body is part of the intake control system in fuel injected engines so as to regulate the amount of air flow to the engine. This particular mechanism functions by putting pressure upon the driver accelerator pedal input. Generally, the throttle body is situated between the air filter box and the intake manifold. It is usually connected to or positioned close to the mass airflow sensor. The largest component inside the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is in order to control air flow.

On nearly all cars, 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 with electronic throttle control, also 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 likewise 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 connects to the black portion on the left hand side which is curved in design. The copper coil placed near this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates revolve in the throttle body each and every time pressure is applied on the accelerator. The throttle passage is then opened to permit 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 so as to produce the desired air-fuel ratio. Often a throttle position sensor or otherwise called TPS is attached 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.

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

In numerous cars it is normal for them to have one throttle body. In order to improve throttle response, more than one could be utilized and connected together by linkages. High performance cars like for instance the BMW M1, along with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are referred to as ITBs or also known as "individual throttle bodies."

The carburator and the throttle body in a non-injected engine are rather the same. The carburator combines the functionality of both the fuel injectors and the throttle body together. They are able to modulate the amount of air flow and combine the fuel and air together. Automobiles which have throttle body injection, that is called TBI by GM and CFI by Ford, put the fuel injectors in the throttle body. This allows an older engine the opportunity to be converted from carburetor to fuel injection without really changing the design of the engine.