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 controls the amount of air which flows into the motor. This mechanism operates in response to driver accelerator pedal input in the main. Generally, the throttle body is situated between the air filter box and the intake manifold. It is normally fixed to or situated near the mass airflow sensor. The largest part inside the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is to control air flow.

On numerous kinds of automobiles, the accelerator pedal motion is communicated via the throttle cable. This activates the throttle linkages that in turn move the throttle plate. In cars with electronic throttle control, otherwise called "drive-by-wire" an electric motor regulates the throttle linkages. The accelerator pedal is attached 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 upon accelerator pedal position together with inputs from other engine sensors. The throttle body has 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 located close to this is what returns the throttle body to its idle position as soon as the pedal is released.

Throttle plates revolve inside the throttle body each time pressure is applied on the accelerator. The throttle passage is then opened to allow a lot more air to flow into the intake manifold. Typically, 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. 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 "WOT" position or anywhere in between these two extremes.

In order to regulate the lowest amount of air flow while idling, some throttle bodies could include valves and adjustments. Even in units that 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 be able to regulate the amount of air which could bypass the main throttle opening.

In many vehicles it is common for them to contain one throttle body. To be able to improve throttle response, more than one could be used and attached together by linkages. High performance automobiles like the BMW M1, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for every 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 together. They operate by combining the fuel and air together and by controlling the amount of air flow. Cars which include throttle body injection, that is referred to as CFI by Ford and TBI by GM, locate the fuel injectors in the throttle body. This enables an old engine the opportunity to be transformed from carburetor to fuel injection without really changing the engine design.