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 regulates the amount of air that flows into the engine. This particular mechanism works in response to driver accelerator pedal input in the main. Generally, the throttle body is located between the intake manifold and the air filter box. It is usually connected to or situated close to the mass airflow sensor. The biggest part inside the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is so as to regulate air flow.

On nearly all automobiles, the accelerator pedal motion is transferred via the throttle cable, therefore activating the throttle linkages works to move the throttle plate. In automobiles consisting of electronic throttle control, otherwise called "drive-by-wire" an electric motor controls 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 Engine Control Unit. The ECU is responsible for determining the throttle opening based upon accelerator pedal position along with inputs from various 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 when the pedal is released.

Throttle plates turn inside the throttle body each time pressure is applied on the accelerator. The throttle passage is then opened to allow 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 to be able to generate the desired air-fuel ratio. Often a throttle position sensor or otherwise called TPS is connected to the shaft of the throttle plate so as 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 regulate the least amount of air flow while idling, various throttle bodies can have valves and adjustments. 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 IACV which the ECU uses to control the amount of air that could bypass the main throttle opening.

In a lot of cars it is normal for them to have one throttle body. So as to improve throttle response, more than one could be used and attached together by linkages. High performance vehicles 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 also known as "individual throttle bodies."

The throttle body and the carburator 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 could regulate the amount of air flow and combine the fuel and air together. Vehicles that have throttle body injection, which is referred to as TBI by GM and CFI by Ford, put the fuel injectors inside the throttle body. This permits an older engine the chance to be converted from carburetor to fuel injection without really changing the engine design.