Forklift Throttle Body

Throttle Body for Forklifts - Where fuel injected engines are concerned, the throttle body is the component of the air intake system that controls the amount of air which flows into the motor. This mechanism operates in response to operator accelerator pedal input in the main. Usually, the throttle body is placed between the intake manifold and the air filter box. It is normally fixed to or located close to the mass airflow sensor. The biggest part in the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is to be able to regulate air flow.

On the majority of cars, the accelerator pedal motion is transferred via the throttle cable, therefore activating the throttle linkages works in order to move the throttle plate. In automobiles consisting of electronic throttle control, also known as "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 otherwise 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 consists of 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 next to this is what returns the throttle body to its idle position when the pedal is released.

The throttle plate rotates within the throttle body each and every time the driver applies pressure on the accelerator pedal. This opens the throttle passage and enables a lot more air to be able 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 produce the desired air-fuel ratio. Often a throttle position sensor or otherwise 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 somewhere in between these two extremes.

So as to control the lowest amount of air flow while idling, some throttle bodies may have valves and adjustments. 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 likewise called IACV that the ECU uses in order to regulate the amount of air that can bypass the main throttle opening.

It is common that numerous cars contain a single throttle body, although, more than one could be used and connected together by linkages so as to improve throttle response. High performance automobiles such as 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 otherwise known as "individual throttle bodies."

The throttle body and the carburator in a non-injected engine are rather similar. The carburator combines the functionality of both the fuel injectors and the throttle body together. They could regulate the amount of air flow and blend the air and fuel together. Cars that include throttle body injection, which is referred to as TBI by GM and CFI by Ford, locate the fuel injectors within the throttle body. This enables an older engine the possibility to be transformed from carburetor to fuel injection without really changing the engine design.