Throttle Body for Forklifts

Forklift Throttle Body - The throttle body is part of the intake control system in fuel injected engines to be able to regulate the amount of air flow to the engine. This mechanism operates by placing pressure on the driver accelerator pedal input. Generally, the throttle body is placed between the intake manifold and the air filter box. It is usually fixed to or located next to the mass airflow sensor. The largest component in the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is to be able to control air flow.

On numerous kinds of cars, the accelerator pedal motion is communicated via the throttle cable. This activates the throttle linkages which in turn move the throttle plate. In vehicles 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 Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position together with inputs from various 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 placed next to this is what returns the throttle body to its idle position after the pedal is released.

Throttle plates revolve in the throttle body every time pressure is placed on the accelerator. The throttle passage is then opened to be able to enable a lot more air to flow into the intake manifold. Normally, 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. Generally a throttle position sensor or TPS is fixed 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 likewise called "WOT" position or somewhere in between these two extremes.

Some throttle bodies could have adjustments and valves in order to control the least amount of airflow all through the idle period. 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 also called IACV that the ECU uses to control the amount of air which could bypass the main throttle opening.

In many vehicles it is normal for them to have a single throttle body. In order to improve throttle response, more than one can be used and connected together by linkages. High performance automobiles like for example the BMW M1, along with high performance motorcycles like for example the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are called ITBs or likewise 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 throttle body and the fuel injectors into one. They could regulate the amount of air flow and blend the fuel and air together. Automobiles that include throttle body injection, that is referred to as TBI by GM and CFI by Ford, locate the fuel injectors inside the throttle body. This permits an older engine the possibility to be transformed from carburetor to fuel injection without considerably altering the design of the engine.