Throttle Body for Forklifts

Throttle Body for Forklift - Where fuel injected engines are concerned, the throttle body is the component of the air intake system that regulates the amount of air which flows into the motor. This mechanism functions in response to driver accelerator pedal input in the main. Generally, the throttle body is placed between the air filter box and the intake manifold. It is normally connected to or positioned next to the mass airflow sensor. The largest part within the throttle body is a butterfly valve called the throttle plate. The throttle plate's main function is to be able to regulate air flow.

On most automobiles, the accelerator pedal motion is transferred via the throttle cable, therefore activating the throttle linkages works so as to move the throttle plate. In cars with electronic throttle control, otherwise known as "drive-by-wire" an electric motor controls the throttle linkages. The accelerator pedal is attached 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 on accelerator pedal position along with inputs from different engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached 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.

Throttle plates revolve in the throttle body each time pressure is applied 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 change 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. Generally a throttle position sensor or 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 also called "WOT" position or anywhere in between these two extremes.

Some throttle bodies may include valves and adjustments in order to regulate the minimum airflow during the idle period. Even in units which are not "drive-by-wire" there will usually be a small electric motor driven valve, the Idle Air Control Valve or likewise called IACV which the ECU uses to regulate the amount of air which can bypass the main throttle opening.

It is common that numerous automobiles contain one throttle body, though, more than one could be utilized and connected together by linkages so as to improve throttle response. High performance vehicles like the BMW M1, together with high performance motorcycles like for example 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."

A throttle body is like the carburetor in a non-injected engine. Carburetors combine the functionality of the fuel injectors and the throttle body into one. They operate by mixing the air and fuel together and by modulating the amount of air flow. Cars which include throttle body injection, which is known as TBI by GM and CFI by Ford, locate the fuel injectors in the throttle body. This permits an older engine the chance to be transformed from carburetor to fuel injection without significantly changing the engine design.