Throttle Body for Forklift

Forklift Throttle Body - The throttle body is a component of the intake control system in fuel injected engines in order to regulate the amount of air flow to the engine. This mechanism works by applying pressure on the driver accelerator pedal input. Usually, the throttle body is located between the air filter box and the intake manifold. It is often fixed to or positioned near the mass airflow sensor. The largest piece 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 the majority of automobiles, the accelerator pedal motion is transferred via the throttle cable, therefore activating the throttle linkages works in order to move the throttle plate. In vehicles with electronic throttle control, likewise 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 particular 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 on accelerator pedal position together with inputs from various 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 that is curved in design. The copper coil positioned next to this is what returns the throttle body to its idle position when the pedal is released.

Throttle plates rotate in the throttle body each and 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 change 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 produce the desired air-fuel ratio. Often a throttle position sensor or also called TPS is connected to the shaft of the throttle plate in order to provide the ECU with information on whether the throttle is in the wide-open throttle or otherwise called "WOT" position, the idle position or somewhere in between these two extremes.

Various throttle bodies may have valves and adjustments so as to regulate the minimum 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 IACV that the ECU utilizes so as to control the amount of air which can bypass the main throttle opening.

In a lot of vehicles it is normal for them to have one throttle body. So as to improve throttle response, more than one can be utilized and attached together by linkages. High performance automobiles such as 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 otherwise known as "individual throttle bodies."

The carburator and the throttle body in a non-injected engine are rather similar. The carburator combines the functionality of both the throttle body and the fuel injectors together. They are able to regulate the amount of air flow and combine the fuel and air together. Vehicles which have throttle body injection, which is referred to as TBI by GM and CFI by Ford, put the fuel injectors in the throttle body. This allows an old engine the opportunity to be converted from carburetor to fuel injection without considerably changing the design of the engine.