Throttle Body for Forklift

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the part of the air intake system which regulates the amount of air which flows into the motor. This particular mechanism operates in response to driver accelerator pedal input in the main. Normally, the throttle body is located between the air filter box and the intake manifold. It is often connected to or placed next to the mass airflow sensor. The largest piece in the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is to regulate air flow.

On the majority of vehicles, the accelerator pedal motion is transferred through the throttle cable, therefore activating the throttle linkages works to move the throttle plate. In vehicles consisting of electronic throttle control, otherwise referred to as "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 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 which is curved in design. The copper coil positioned next to this is what returns the throttle body to its idle position as soon as the pedal is released.

Throttle plates turn within the throttle body each time pressure is placed on the accelerator. The throttle passage is then opened to permit a lot more air to flow into the intake manifold. Usually, 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 generate the desired air-fuel ratio. Frequently a throttle position sensor or TPS is fixed to the shaft of the throttle plate to provide the ECU with information on whether the throttle is in the wide-open throttle or likewise called "WOT" position, the idle position or somewhere in between these two extremes.

Several throttle bodies may have valves and adjustments to be able to control the least amount of airflow through 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 IACV which the ECU utilizes to be able to regulate the amount of air that can bypass the main throttle opening.

In various automobiles it is common for them to contain one throttle body. In order 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 the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are referred to as ITBs or likewise known as "individual throttle bodies."

The carburator and the throttle body in a non-injected engine are somewhat similar. The carburator combines the functionality of both the fuel injectors and the throttle body into one. They can modulate the amount of air flow and blend the air and fuel together. Vehicles that have throttle body injection, that is known as CFI by Ford and TBI by GM, locate the fuel injectors inside the throttle body. This enables an older engine the opportunity to be transformed from carburetor to fuel injection without really changing the engine design.