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 that flows into the motor. This mechanism operates in response to driver accelerator pedal input in the main. Usually, the throttle body is situated between the air filter box and the intake manifold. It is usually attached to or positioned close to the mass airflow sensor. The biggest piece inside the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is to control air flow.

On various kinds of cars, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages which in turn move the throttle plate. In cars with 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 sensor sends the pedal position to the ECU or likewise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position along with inputs from other engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached to the black part on the left hand side that is curved in design. The copper coil located close to this is what returns the throttle body to its idle position when the pedal is released.

The throttle plate rotates inside the throttle body each time the driver applies pressure on the accelerator pedal. This opens the throttle passage and allows much more air to flow into the intake manifold. Usually, 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 also 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 otherwise called "WOT" position or somewhere in between these two extremes.

To be able to regulate the least amount of air flow while idling, several 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 IACV which the ECU uses in order to control the amount of air that can bypass the main throttle opening.

It is common that lots of vehicles contain a single throttle body, though, more than one can be utilized and connected together by linkages so as to improve throttle response. High performance vehicles such as the BMW M1, along with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for each 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 quite the same. The carburator combines the functionality of both the throttle body and the fuel injectors together. They could regulate the amount of air flow and combine the fuel and air together. Vehicles which have throttle body injection, that is referred to as CFI by Ford and TBI by GM, situate the fuel injectors inside the throttle body. This permits an old engine the possibility to be transformed from carburetor to fuel injection without significantly changing the engine design.