Throttle Body for Forklift

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the component of the air intake system which controls the amount of air which flows into the motor. This mechanism functions in response to operator accelerator pedal input in the main. Usually, the throttle body is positioned between the air filter box and the intake manifold. It is usually connected to or positioned near the mass airflow sensor. The biggest component in the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is in order to regulate air flow.

On most automobiles, the accelerator pedal motion is transferred via the throttle cable, hence activating the throttle linkages works in order to move the throttle plate. In cars with electronic throttle control, otherwise known 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 likewise 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 has 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 located next to this is what returns the throttle body to its idle position once the pedal is released.

The throttle plate revolves in the throttle body each time the driver presses on the accelerator pedal. This opens the throttle passage and permits a lot more air to be able 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 so as to generate the desired air-fuel ratio. Often a throttle position sensor or otherwise called TPS is attached to the shaft of the throttle plate to be able 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 somewhere in between these two extremes.

To be able to regulate the least amount of air flow while idling, some throttle bodies could have adjustments and valves. Even in units which are not "drive-by-wire" there would normally be a small electric motor driven valve, the Idle Air Control Valve or also called IACV that the ECU utilizes to regulate the amount of air which could bypass the main throttle opening.

In numerous vehicles it is common for them to contain a single throttle body. In order to improve throttle response, more than one can be used and connected 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 rather the same. The carburator combines the functionality of both the fuel injectors and the throttle body together. They could regulate the amount of air flow and mix the air and fuel together. Automobiles that include throttle body injection, which is called TBI by GM and CFI by Ford, situate the fuel injectors in the throttle body. This allows an older engine the opportunity to be transformed from carburetor to fuel injection without considerably altering the design of the engine.