Throttle Body for Forklift

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the part of the air intake system that controls the amount of air which flows into the engine. This mechanism operates in response to driver accelerator pedal input in the main. Normally, the throttle body is situated between the air filter box and the intake manifold. It is normally attached to or situated close 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 task is so as to control air flow.

On the majority of vehicles, the accelerator pedal motion is transferred via the throttle cable, thus activating the throttle linkages works to be able to 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 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 various engine sensors. The throttle body consists of a throttle position sensor. The throttle cable connects to the black part on the left hand side which is curved in design. The copper coil situated next to this is what returns the throttle body to its idle position when the pedal is released.

The throttle plate turns in the throttle body every time the operator applies pressure on the accelerator pedal. This opens the throttle passage and allows more air to be able 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 in order to generate the desired air-fuel ratio. Frequently a throttle position sensor or TPS is connected to the shaft of the throttle plate so as to provide the ECU with information on whether the throttle is in the idle position, the wide-open position or likewise called "WOT" position or somewhere in between these two extremes.

To be able to regulate the minimum air flow while idling, several throttle bodies can have valves and adjustments. 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 likewise called IACV that the ECU uses so as to regulate the amount of air that could bypass the main throttle opening.

It is common that many vehicles contain a single throttle body, even though, more than one can be utilized and connected together by linkages in order to improve throttle response. High performance vehicles like the BMW M1, along with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for each cylinder. These models are referred to as ITBs or "individual throttle bodies."

The throttle body and the carburator in a non-injected engine are somewhat the same. The carburator combines the functionality of both the throttle body and the fuel injectors into one. They could control the amount of air flow and blend the fuel and air together. Vehicles which have throttle body injection, which is called CFI by Ford and TBI by GM, situate the fuel injectors inside the throttle body. This permits an older engine the chance to be transformed from carburetor to fuel injection without significantly altering the engine design.