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 control the amount of air flow to the engine. This mechanism works by applying pressure upon the driver accelerator pedal input. Normally, the throttle body is situated between the intake manifold and the air filter box. It is normally attached to or placed close to the mass airflow sensor. The biggest part within the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is in order to control air flow.

On most 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, also referred to as "drive-by-wire" an electric motor controls the throttle linkages. The accelerator pedal connects 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 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 situated next to this is what returns the throttle body to its idle position after the pedal is released.

Throttle plates revolve inside the throttle body each time pressure is placed on the accelerator. The throttle passage is then opened in order to permit a lot more air to flow into the intake manifold. Normally, 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 to be able to generate the desired air-fuel ratio. Frequently a throttle position sensor or otherwise called TPS is attached to the shaft of the throttle plate 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 anywhere in between these two extremes.

Several throttle bodies may include adjustments and valves to be able to control the lowest amount of airflow all through the idle period. Even in units that are not "drive-by-wire" there will usually be a small electric motor driven valve, the Idle Air Control Valve or also called IACV that the ECU utilizes so as to regulate the amount of air which could bypass the main throttle opening.

In various cars it is normal for them to contain one throttle body. To be able to improve throttle response, more than one can be used and attached together by linkages. High performance cars like for instance the BMW M1, together with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for each cylinder. These models are called ITBs or otherwise known as "individual throttle bodies."

A throttle body is like the carburetor in a non-injected engine. Carburetors combine the functionality of the throttle body and the fuel injectors into one. They operate by combining the fuel and air together and by controlling the amount of air flow. Cars which include throttle body injection, that is referred to as TBI by GM and CFI by Ford, situate the fuel injectors in the throttle body. This permits an older engine the possibility to be transformed from carburetor to fuel injection without significantly changing the design of the engine.