Throttle Body for Forklifts

Forklift Throttle Body - The throttle body is a component of the intake control system in fuel injected engines so as to regulate the amount of air flow to the engine. This particular mechanism operates by applying pressure on the operator accelerator pedal input. Usually, the throttle body is placed between the intake manifold and the air filter box. It is usually connected to or positioned next to the mass airflow sensor. The biggest part within the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is so as to control air flow.

On nearly all vehicles, the accelerator pedal motion is transferred via the throttle cable, hence activating the throttle linkages works to move the throttle plate. In vehicles with electronic throttle control, otherwise referred to as "drive-by-wire" an electric motor regulates 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 upon accelerator pedal position together 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 situated near this is what returns the throttle body to its idle position as soon as the pedal is released.

The throttle plate turns within the throttle body every time the driver presses on the accelerator pedal. This opens the throttle passage and enables more air to be able to flow into the intake manifold. Typically, 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 produce the desired air-fuel ratio. Often 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 wide-open throttle or likewise called "WOT" position, the idle position or somewhere in between these two extremes.

Various throttle bodies may include adjustments and valves to be able to control the least amount of airflow all through the idle period. 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 likewise called IACV that the ECU uses to control the amount of air that could bypass the main throttle opening.

It is common that lots of cars contain a single throttle body, even if, more than one can be utilized and connected together by linkages so as to improve throttle response. High performance cars like for example the BMW M1, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are called ITBs or also 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 together. They work by blending the air and fuel together and by controlling the amount of air flow. Vehicles which include throttle body injection, that is called TBI by GM and CFI by Ford, situate the fuel injectors in the throttle body. This enables an old engine the possibility to be converted from carburetor to fuel injection without significantly altering the design of the engine.