Throttle Body for Forklift

Forklift Throttle Body - The throttle body is a component of the intake control system in fuel injected engines to regulate the amount of air flow to the engine. This particular mechanism functions by putting pressure upon the operator accelerator pedal input. Generally, the throttle body is positioned between the intake manifold and the air filter box. It is often fixed to or situated next to the mass airflow sensor. The biggest part inside the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is to regulate air flow.

On many kinds of automobiles, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages that in turn move the throttle plate. In automobiles consisting of electronic throttle control, also referred to as "drive-by-wire" an electric motor controls 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 also 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 consists of a throttle position sensor. The throttle cable connects to the black part on the left hand side that is curved in design. The copper coil placed close to this is what returns the throttle body to its idle position when the pedal is released.

The throttle plate rotates within the throttle body each time the driver presses on the accelerator pedal. This opens the throttle passage and enables 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 in order 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 be able to provide the ECU with information on whether the throttle is in the wide-open throttle or also called "WOT" position, the idle position or anywhere in between these two extremes.

So as to control the lowest amount of air flow while idling, several throttle bodies could include adjustments and valves. Even in units that are not "drive-by-wire" there would usually be a small electric motor driven valve, the Idle Air Control Valve or IACV that the ECU uses so as to control the amount of air that can bypass the main throttle opening.

It is common that lots of vehicles have one throttle body, although, more than one could be utilized and attached together by linkages to be able to improve throttle response. High performance vehicles such as the BMW M1, together with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are referred to as ITBs or likewise known as "individual throttle bodies."

A throttle body is similar to the carburetor in a non-injected engine. Carburetors combine the functionality of the fuel injectors and the throttle body together. They function by blending the air and fuel together and by modulating the amount of air flow. Vehicles that include throttle body injection, which is referred to as CFI by Ford and TBI by GM, situate the fuel injectors within the throttle body. This allows an old engine the possibility to be transformed from carburetor to fuel injection without really altering the engine design.