Forklift Throttle Body

Throttle Body for Forklift - The throttle body is a component of the intake control system in fuel injected engines so as to control the amount of air flow to the engine. This mechanism operates by putting pressure upon the driver accelerator pedal input. Usually, the throttle body is situated between the intake manifold and the air filter box. It is normally fixed to or located next to the mass airflow sensor. The largest part in the throttle body is a butterfly valve called the throttle plate. The throttle plate's main function is to be able to control air flow.

On numerous 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 vehicles consisting of electronic throttle control, also known 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 sensor sends the pedal position to the ECU or otherwise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based upon accelerator pedal position together with inputs from other engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached to the black part on the left hand side that is curved in design. The copper coil located close 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 allows more air 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 so as to generate the desired air-fuel ratio. Frequently a throttle position sensor or also called TPS is attached to the shaft of the throttle plate in order to provide the ECU with information on whether the throttle is in the wide-open throttle or "WOT" position, the idle position or somewhere in between these two extremes.

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

It is common that various vehicles have one throttle body, though, more than one can be utilized and connected together by linkages to be able to improve throttle response. High performance vehicles like for example the BMW M1, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for each cylinder. These models are referred to as ITBs or otherwise known as "individual throttle bodies."

The carburator and the throttle body in a non-injected engine are quite similar. The carburator combines the functionality of both the throttle body and the fuel injectors together. They are able to regulate the amount of air flow and mix the air and fuel together. Automobiles which have throttle body injection, that is known as CFI by Ford and TBI by GM, put the fuel injectors in the throttle body. This allows an old engine the possibility to be transformed from carburetor to fuel injection without considerably altering the design of the engine.