

Throttle Body for Forklift

Forklift Throttle Body - 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 particular mechanism works by applying pressure on the operator accelerator pedal input. Generally, the throttle body is located between the intake manifold and the air filter box. It is often fixed to or positioned close to the mass airflow sensor. The largest part within the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main task is to be able to regulate air flow.

On many kinds of cars, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages that in turn move the throttle plate. In vehicles with electronic throttle control, otherwise known 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 also 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 connects to the black part on the left hand side that is curved in design. The copper coil positioned next to this is what returns the throttle body to its idle position after the pedal is released.

The throttle plate revolves inside the throttle body every time the driver applies pressure on the accelerator pedal. This opens the throttle passage and permits more air to flow into the intake manifold. Usually, an airflow sensor measures this adjustment 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 likewise called TPS is fixed to the shaft of the throttle plate to provide the ECU with information on whether the throttle is in the idle position, the wide-open position or otherwise called "WOT" position or somewhere in between these two extremes.

To be able to regulate the minimum air flow while idling, several throttle bodies could include adjustments and valves. 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 IACV that the ECU utilizes to control the amount of air that can bypass the main throttle opening.

It is common that a lot of vehicles contain one throttle body, although, more than one can be utilized and attached together by linkages in order to improve throttle response. High performance automobiles like for example the BMW M1, along with high performance motorcycles like for example the Suzuki Hayabusa have a separate throttle body for every 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 somewhat the same. The carburator combines the functionality of both the throttle body and the fuel injectors together. They are able to control the amount of air flow and blend the fuel and air together. Vehicles which have throttle body injection, that is called TBI by GM and CFI by Ford, put the fuel injectors inside the throttle body. This permits an old engine the opportunity to be transformed from carburetor to fuel injection without significantly altering the engine design.