

Forklift Throttle Body

Throttle Body for Forklift - The throttle body is part of the intake control system in fuel injected engines to be able to regulate the amount of air flow to the engine. This particular mechanism operates by applying pressure upon the driver accelerator pedal input. Usually, the throttle body is positioned between the intake manifold and the air filter box. It is often connected to or located next to the mass airflow sensor. The largest piece in the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is to control air flow.

On the majority of automobiles, the accelerator pedal motion is transferred via the throttle cable, thus activating the throttle linkages works to be able to move the throttle plate. In automobiles consisting of electronic throttle control, also called "drive-by-wire" an electric motor regulates the throttle linkages. The accelerator pedal connects to a sensor and not to the throttle body. This particular sensor sends the pedal position to the ECU or Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position along with inputs from other engine sensors. The throttle body has a throttle position sensor. The throttle cable connects to the black portion on the left hand side which is curved in design. The copper coil located 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 and every time the driver applies pressure on the accelerator pedal. This opens the throttle passage and enables more air to flow into the intake manifold. Usually, 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 produce the desired air-fuel ratio. Often a throttle position sensor or likewise 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 in order to regulate the minimum airflow during 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 that the ECU uses in order to regulate the amount of air which could bypass the main throttle opening.

It is common that lots of automobiles contain a single throttle body, although, more than one can be utilized and attached together by linkages in order to improve throttle response. High performance cars such as the BMW M1, together with high performance motorcycles like for instance the Suzuki Hayabusa have a separate throttle body for each cylinder. These models are referred to as ITBs or also known as "individual throttle bodies."

The carburator and the throttle body in a non-injected engine are rather similar. The carburator combines the functionality of both the throttle body and the fuel injectors together. They can regulate the amount of air flow and mix the air and fuel together. Vehicles that have throttle body injection, that is known as TBI by GM and CFI by Ford, locate the fuel injectors inside the throttle body. This permits an old engine the chance to be transformed from carburetor to fuel injection without considerably changing the engine design.