

Forklift Throttle Body

Throttle Body for Forklifts - The throttle body is part of the intake control system in fuel injected engines to regulate the amount of air flow to the engine. This mechanism operates by putting pressure upon the operator accelerator pedal input. Usually, the throttle body is located between the intake manifold and the air filter box. It is usually connected to or located close 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 task is to control air flow.

On nearly all automobiles, the accelerator pedal motion is transferred via the throttle cable, hence activating the throttle linkages works in order to move the throttle plate. In cars consisting of electronic throttle control, otherwise referred to as "drive-by-wire" an electric motor controls 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 also 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 is attached to the black part on the left hand side that is curved in design. The copper coil placed next to this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates revolve within the throttle body each time pressure is placed on the accelerator. The throttle passage is then opened to permit a lot 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. Frequently a throttle position sensor or otherwise called TPS is connected 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 "WOT" position or somewhere in between these two extremes.

Some throttle bodies may include adjustments and valves so as to regulate the minimum airflow 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 otherwise called IACV that the ECU utilizes so as to regulate the amount of air which could bypass the main throttle opening.

In several vehicles it is common for them to contain one throttle body. To be able to improve throttle response, more than one can be utilized and connected together by linkages. High performance cars such as the BMW M1, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are called ITBs or otherwise known as "individual throttle bodies."

The throttle body and the carburetor in a non-injected engine are rather the same. The carburetor combines the functionality of both the throttle body and the fuel injectors together. They can regulate the amount of air flow and mix the fuel and air together. Automobiles which have throttle body injection, which is known as TBI by GM and CFI by Ford, locate the fuel injectors in the throttle body. This enables an old engine the opportunity to be transformed from carburetor to fuel injection without considerably altering the engine design.