

Forklift Throttle Body

Throttle Body for Forklifts - The throttle body is a component 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 functions by putting pressure on the driver accelerator pedal input. Usually, the throttle body is situated between the air filter box and the intake manifold. It is normally connected to or placed next to the mass airflow sensor. The biggest piece within the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is so as to regulate air flow.

On most cars, the accelerator pedal motion is transferred through the throttle cable, thus activating the throttle linkages works to move the throttle plate. In vehicles with electronic throttle control, likewise called "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 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 close to this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates turn in the throttle body each time pressure is applied on the accelerator. The throttle passage is then opened to allow much more air to flow into the intake manifold. Typically, 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 generate the desired air-fuel ratio. Often a throttle position sensor or otherwise called TPS is attached 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.

Various throttle bodies may have valves and adjustments to be able to regulate the minimum airflow during the idle period. Even in units that are not "drive-by-wire" there will normally be a small electric motor driven valve, the Idle Air Control Valve or likewise called IACV which the ECU uses so as to control the amount of air which could bypass the main throttle opening.

It is common that several vehicles contain a single throttle body, even though, more than one could be utilized and connected together by linkages to be able to improve throttle response. High performance cars such as the BMW M1, along with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are called ITBs or also known as "individual throttle bodies."

A throttle body is like the carburetor in a non-injected engine. Carburetors combine the functionality of the throttle body and the fuel injectors into one. They operate by blending the fuel and air together and by modulating the amount of air flow. Automobiles which include throttle body injection, that is referred to as CFI by Ford and TBI by GM, situate the fuel injectors in the throttle body. This permits an old engine the possibility to be converted from carburetor to fuel injection without really changing the engine design.