

Forklift Throttle Body

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the component of the air intake system that controls the amount of air which flows into the engine. This particular mechanism works in response to operator accelerator pedal input in the main. Usually, the throttle body is situated between the intake manifold and the air filter box. It is often attached to or placed next to the mass airflow sensor. The largest part inside the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main task is so as to regulate air flow.

On the majority of automobiles, the accelerator pedal motion is transferred via the throttle cable, hence activating the throttle linkages works to be able to move the throttle plate. In vehicles with electronic throttle control, also called "drive-by-wire" an electric motor controls the throttle linkages. The accelerator pedal connects to a sensor and not to the throttle body. This 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 together with inputs from various 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 situated close to this is what returns the throttle body to its idle position when the pedal is released.

Throttle plates rotate inside the throttle body every time pressure is applied on the accelerator. The throttle passage is then opened to be able to allow a lot more air to flow into the intake manifold. Usually, 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 in order to generate the desired air-fuel ratio. Often a throttle position sensor or likewise called TPS is connected to the shaft of the throttle plate to be able to provide the ECU with information on whether the throttle is in the wide-open throttle or also called "WOT" position, the idle position or anywhere in between these two extremes.

So as to control the least amount of air flow while idling, some throttle bodies may have valves and adjustments. 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 IACV which the ECU utilizes so as to regulate the amount of air which could bypass the main throttle opening.

It is common that many cars have a single throttle body, even if, 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, along with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for each 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 fuel injectors and the throttle body into one. They can control the amount of air flow and combine the air and fuel together. Cars that include throttle body injection, that is referred to as CFI by Ford and TBI by GM, locate the fuel injectors inside the throttle body. This permits an older engine the chance to be transformed from carburetor to fuel injection without considerably altering the engine design.