

Throttle Body for Forklift

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

On nearly all cars, the accelerator pedal motion is transferred via the throttle cable, therefore activating the throttle linkages works to be able to move the throttle plate. In cars with electronic throttle control, likewise 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 particular 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 along with inputs from other engine sensors. The throttle body has 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 once the pedal is released.

The throttle plate revolves within the throttle body each and every time the driver presses on the accelerator pedal. This opens the throttle passage and allows much more air to be able to flow into the intake manifold. Normally, 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 in order to generate the desired air-fuel ratio. Generally a throttle position sensor or likewise called TPS is fixed to the shaft of the throttle plate so as 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.

So as to regulate the lowest amount of air flow while idling, various throttle bodies may have adjustments and valves. Even in units that are not "drive-by-wire" there would normally be a small electric motor driven valve, the Idle Air Control Valve or IACV which the ECU uses to be able to regulate the amount of air that can bypass the main throttle opening.

It is common that numerous automobiles contain one throttle body, even though, more than one could be utilized and connected together by linkages so as to improve throttle response. High performance vehicles like for instance the BMW M1, along with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for each cylinder. These models are referred to as ITBs or "individual throttle bodies."

A throttle body is like the carburetor in a non-injected engine. Carburetors combine the functionality of the fuel injectors and the throttle body into one. They work by combining the air and fuel together and by controlling the amount of air flow. Vehicles that include throttle body injection, which is called TBI by GM and CFI by Ford, situate the fuel injectors in the throttle body. This permits an older engine the opportunity to be converted from carburetor to fuel injection without really altering the engine design.