

Forklift Throttle Body

Throttle Body for Forklift - The throttle body is part of the intake control system in fuel injected engines in order to regulate the amount of air flow to the engine. This particular mechanism operates by placing pressure on the operator accelerator pedal input. Normally, the throttle body is placed between the air filter box and the intake manifold. It is normally connected to or placed close to the mass airflow sensor. The largest part inside the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is so as to control air flow.

On the majority of cars, the accelerator pedal motion is transferred through the throttle cable, hence activating the throttle linkages works to be able to move the throttle plate. In cars with electronic throttle control, also referred to as "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 particular sensor sends the pedal position to the ECU or 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 consists of a throttle position sensor. The throttle cable connects to the black portion on the left hand side that is curved in design. The copper coil placed near this is what returns the throttle body to its idle position when the pedal is released.

Throttle plates revolve in the throttle body each time pressure is placed on the accelerator. The throttle passage is then opened to be able to permit 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 so as to generate the desired air-fuel ratio. Frequently a throttle position sensor or TPS is fixed to the shaft of the throttle plate in order to provide the ECU with information on whether the throttle is in the idle position, the wide-open position or "WOT" position or anywhere in between these two extremes.

Several throttle bodies may have adjustments and valves to be able to control the least amount of airflow throughout the idle period. Even in units that are not "drive-by-wire" there will often be a small electric motor driven valve, the Idle Air Control Valve or IACV which the ECU uses in order to regulate the amount of air that can bypass the main throttle opening.

It is common that a lot of automobiles contain one throttle body, even if, more than one could be used and attached together by linkages so as to improve throttle response. High performance cars like for example the BMW M1, along with high performance motorcycles like for example the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are referred to as ITBs or likewise known as "individual throttle bodies."

The carburator and the throttle body in a non-injected engine are somewhat the same. The carburator combines the functionality of both the fuel injectors and the throttle body into one. They can modulate the amount of air flow and mix the air and fuel together. Cars that include throttle body injection, which is referred to as TBI by GM and CFI by Ford, locate the fuel injectors in the throttle body. This permits an older engine the possibility to be transformed from carburetor to fuel injection without really changing the engine design.