

Throttle Body for Forklift

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the component of the air intake system which regulates the amount of air which flows into the engine. This particular mechanism works in response to driver accelerator pedal input in the main. Generally, the throttle body is located between the air filter box and the intake manifold. It is usually attached to or positioned next to the mass airflow sensor. The biggest part in 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 cars, the accelerator pedal motion is transferred through the throttle cable, therefore activating the throttle linkages works so as to move the throttle plate. In cars with electronic throttle control, otherwise 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 on accelerator pedal position together with inputs from other engine sensors. The throttle body has a throttle position sensor. The throttle cable is attached to the black portion on the left hand side that is curved in design. The copper coil located near this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates revolve in the throttle body each and every time pressure is applied on the accelerator. The throttle passage is then opened so as 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 so as to produce the desired air-fuel ratio. Often a throttle position sensor or otherwise called TPS is attached 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 also called "WOT" position or somewhere in between these two extremes.

Some throttle bodies could have valves and adjustments to be able to regulate the least amount of airflow through the idle period. Even in units which are not "drive-by-wire" there would often be a small electric motor driven valve, the Idle Air Control Valve or IACV that the ECU utilizes to be able to regulate the amount of air which could bypass the main throttle opening.

It is common that lots of vehicles contain one throttle body, even if, more than one could be utilized and attached 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 each and every cylinder. These models are called ITBs or otherwise known as "individual throttle bodies."

The carburator and the throttle body in a non-injected engine are rather the same. The carburator combines the functionality of both the throttle body and the fuel injectors together. They could regulate the amount of air flow and blend the fuel and air together. Vehicles which include throttle body injection, that is called CFI by Ford and TBI by GM, locate the fuel injectors within the throttle body. This enables an older engine the chance to be converted from carburetor to fuel injection without considerably altering the design of the engine.