

Forklift Throttle Body

Forklift Throttle Body - The throttle body is a component of the intake control system in fuel injected engines to be able to control the amount of air flow to the engine. This particular mechanism works by applying pressure on the driver accelerator pedal input. Usually, the throttle body is located between the air filter box and the intake manifold. It is often fixed to or located near the mass airflow sensor. The biggest piece in the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is in order to regulate air flow.

On several kinds of automobiles, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages which in turn move the throttle plate. In vehicles consisting of electronic throttle control, also known as "drive-by-wire" an electric motor regulates 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 also 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 is attached to the black portion on the left hand side that is curved in design. The copper coil placed next to this is what returns the throttle body to its idle position when the pedal is released.

Throttle plates turn 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 to be able to generate the desired air-fuel ratio. Generally a throttle position sensor or likewise called TPS is attached to the shaft of the throttle plate to provide the ECU with information on whether the throttle is in the wide-open throttle or otherwise called "WOT" position, the idle position or anywhere in between these two extremes.

Several throttle bodies can include adjustments and valves in order to control the minimum airflow during the idle period. Even in units that are not "drive-by-wire" there would usually be a small electric motor driven valve, the Idle Air Control Valve or IACV which the ECU utilizes to control the amount of air which can bypass the main throttle opening.

It is common that several cars contain one 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 like for instance the BMW M1, along with high performance motorcycles like for instance 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."

A throttle body is like the carburetor in a non-injected engine. Carburetors combine the functionality of the fuel injectors and the throttle body together. They function by mixing the air and fuel together and by controlling the amount of air flow. Automobiles which have throttle body injection, which is referred to as CFI by Ford and TBI by GM, locate the fuel injectors inside the throttle body. This allows an older engine the chance to be transformed from carburetor to fuel injection without really altering the design of the engine.