Throttle Body for Forklifts

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 which flows into the motor. This particular mechanism operates 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 attached to or situated close to the mass airflow sensor. The biggest part inside the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main task is in order to control air flow.

On the majority of automobiles, the accelerator pedal motion is transferred through the throttle cable, thus activating the throttle linkages works to move the throttle plate. In cars with electronic throttle control, likewise referred to 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 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 consists of a throttle position sensor. The throttle cable is attached to the black portion on the left hand side which 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.

Throttle plates rotate within the throttle body each time pressure is applied on the accelerator. The throttle passage is then opened so as to enable a lot more air to flow into the intake manifold. Normally, an airflow sensor measures this adjustment 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. Generally a throttle position sensor or TPS is attached 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 anywhere in between these two extremes.

Various throttle bodies could include adjustments and valves in order to control the lowest amount of airflow throughout the idle period. Even in units that are not "drive-by-wire" there will 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.

In numerous cars it is common for them to contain a single throttle body. To be able to improve throttle response, more than one can be used and attached together by linkages. High performance vehicles like for instance the BMW M1, along with high performance motorcycles like for instance the Suzuki Hayabusa have a separate throttle body for each cylinder. These models are called ITBs or "individual throttle bodies."

A throttle body is similar to the carburetor in a non-injected engine. Carburetors combine the functionality of the throttle body and the fuel injectors into one. They work by mixing the fuel and air together and by regulating the amount of air flow. Cars which have throttle body injection, which is called TBI by GM and CFI by Ford, situate the fuel injectors in the throttle body. This allows an old engine the chance to be transformed from carburetor to fuel injection without significantly changing the engine design.