1974-79 EXHAUST EMISSION SYSTEMS
Renault Fuel Evaporation

All Models

DESCRIPTION

Fuel evaporation system is designed to prevent the escape of fuel vapors into the atmosphere. System consists of fuel tank, a fuel filler neck adapted to unleaded fuel delivery nozzles, and a non-vented filler cap. A two-way check valve, an activated charcoal canister, a vapor/liquid separator (part of two-way check valve) and connecting hoses complete system.

The R-5 is equipped with a check ball in fuel pump return line. The 1974 models also have an expansion tank, a control valve (built into the carburetor float chamber), and a series of ventilation lines which are used to connect the various components.

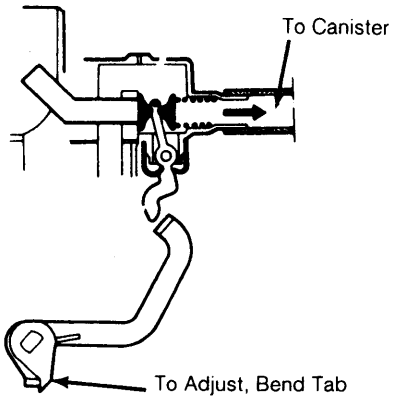

Fig. 1: Carburetor Float Chamber Control Valve

OPERATION

The fuel vapor line, and on some models the filler neck, extends partially into fuel tank, causing an air pocket above fuel level in tank. As fuel expands, or when pressure in tank reaches 5 psi (.35 kg/cm²), valve in two-way check valve opens and allows fuel vapor to travel to charcoal canister.

On 1974 models, high ambient temperatures will also cause fuel in carburetor float chamber to expand. When the engine is not running, the carburetor float chamber control valve is open to the carbon canister and fuel vapors from the float chamber pass to the canister where they are absorbed by activated charcoal.

The charcoal canister removes gasoline vapors before venting to atmosphere. As fuel level drops, other valve in two-way check valve opens and air is drawn into fuel tank. Check ball allows fuel returning to tank to flow from pump to tank only.

TESTING

CARBURETOR FLOAT CHAMBER CONTROL VALVE

When engine is stopped, valve should be open to carbon canister. When engine is running, valve should be open to atmosphere. Clearance between valve lever and actuating arm should be .012-.024" (.020-.060" on R-12). Adjust to specifications by bending tab of actuating arm which contacts back part of cam. *See Fig. 1.*

NOTE: If carburetor has earlier valve with external hairpin spring, newer valve with internal coil spring must be installed.

MAINTENANCE

At regular intervals system should be checked and foam filler located at atmospheric intake of charcoal canister should be cleaned.

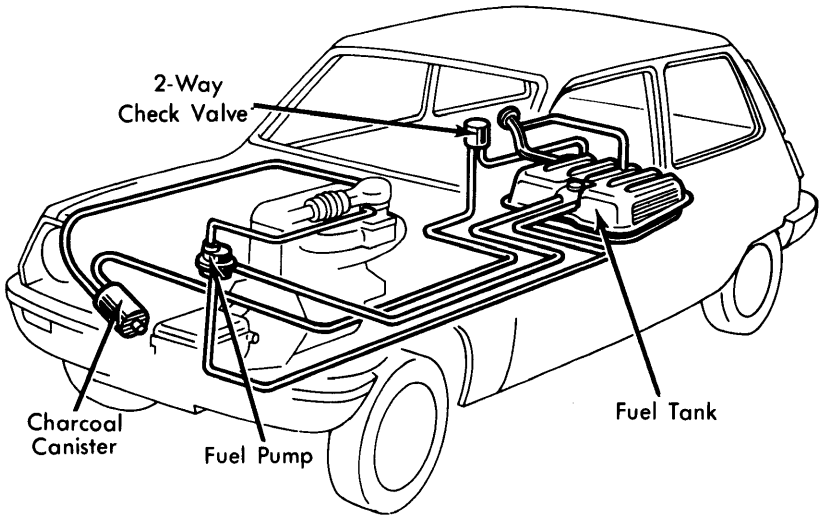

Fig. 2: Renault R-5 Fuel Evaporation System (Typical)