

# Fuel Evaporation

## VOLKSWAGEN

### Volkswagen - All Models (1970-73)

#### DESCRIPTION

Volkswagen activated charcoal filter system is designed to prevent fuel vapors from being emitted into the atmosphere. The system consists of a non-vented fuel tank filler cap, an expansion chamber, (expansion chamber is built into fuel tank on 1971 Type 2 models), an activated charcoal canister, and a series of vent lines which interconnect the components between the fuel tank and the carburetor air cleaner. A pressure line, used to purge the system, is connected between the engine blower assembly and the charcoal canister.

#### OPERATION

Expanded fuel, caused by high ambient temperatures, and fuel vapors pass through a vent line to an expansion chamber. Liquid fuel passing into the expansion chamber is returned to the main fuel tank as fuel is drawn from the main tank during normal operation. Fuel vapors pass from the expansion chamber, through a vent line, to the activated charcoal canister where they are adsorbed by activated charcoal. When the engine is running, air is forced into the charcoal canister through the pressure line connected between the engine blower assembly and the canister. The fuel vapors are drawn from the canister, through a vacuum line, to the carburetor air cleaner and into the intake manifold where they enter the combustion system and are burned. This action purges the activated charcoal and renews its storage capacity.

#### MAINTENANCE

System does not require normal maintenance. Should any component become damaged or fail to function properly, it should be replaced.

