Fuel Evaporation

SAAB

Saab V4
Saab 99

DESCRIPTION

The Saab Evaporation Loss Control System controls the emission of fuel vapors into the atmosphere. The system is sealed to outside air by a sealed filler cap. A charcoal canister is provided to adsorb fuel vapors. The fuel tank is located between the rear wheels of the car while the charcoal canister is located in the engine compartment.

OPERATION

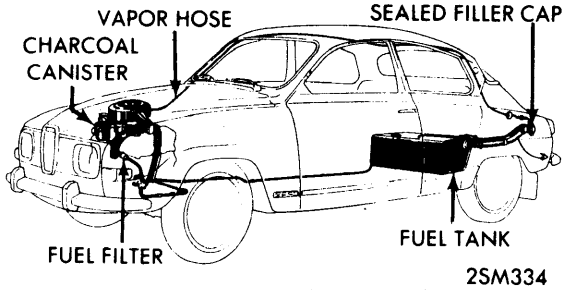
Engine Running – Vapors stored in the charcoal canister are purged by fresh air from the engine air cleaner which is drawn in through the canister filter in the bottom of the canister. Fuel vapors are then drawn into the engine to be burned with the regular air/fuel mixture.

Engine Not Running – Vapors created in the fuel system travel through pipes to the charcoal canister and are adsorbed and stored in the charcoal element.

MAINTENANCE

Canister Filter – Located in bottom of the charcoal canister. Clean filter every 6,000 miles.

Engine Air Filter – Clean with compressed air every 6,000 miles and replace element every 18,000 miles.



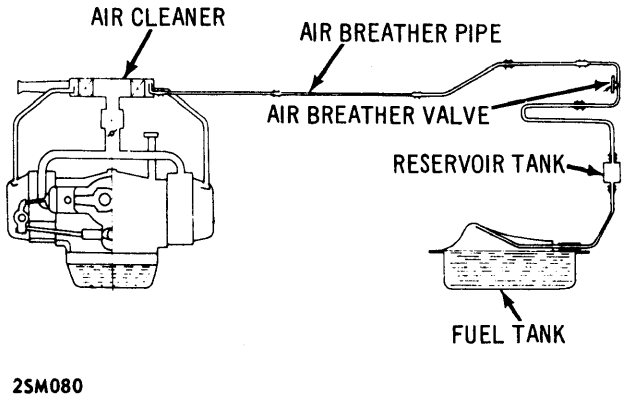
FUEL SYSTEM (TYPICAL)

SUBARU 1100 & 1300G

Subaru 1100
Subaru 1300G

DESCRIPTION

System prevents discharge of evaporative gas from fuel tank into atmosphere. It is instead conducted to the air cleaner unit and burnt in the combustion chamber with fresh air. No canister or absorbent is used. System consists of a sealed fuel tank cap, a reservoir tank for Sedan and two reservoir tanks for Station Wagon, and air breather valve, breather hoses, breather pipe and a modified air cleaner unit. Gasoline vapor, evaporated from fuel in tank, is caught in the reservoir tank and conducted into the dirty side of the air cleaner element by way of an air breather valve and air breather hoses.



EVAPORATIVE SYSTEM (SEDAN)

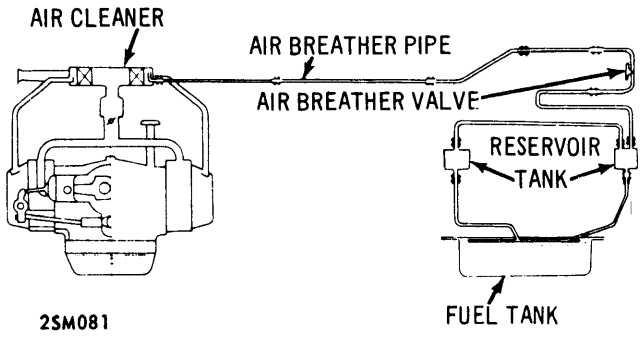
OPERATION

While engine is running, gases are drawn into the intake manifold to be burned. When engine is stopped, gases remain on the inner walls of air cleaner housing or element. When engine is started, the gas which has condensed in the air cleaner evaporates again and is drawn into the manifold with fresh air.

Breather Valve – In order to prevent over filling of fuel tank, an air breather valve pinches off the air breather hose whenever the access lid to the gas tank cap is opened. This prevents fuel from entering the line and overflowing into the air cleaner.

MAINTENANCE

System should be checked every 12,000 miles or 12 months. Check pipes and hoses for collapse, clogging or cracking. If clogged, clean with solvent and blow dry with compressed air. Replace any damaged or worn hose.



EVAPORATIVE SYSTEM (STATION WAGON)