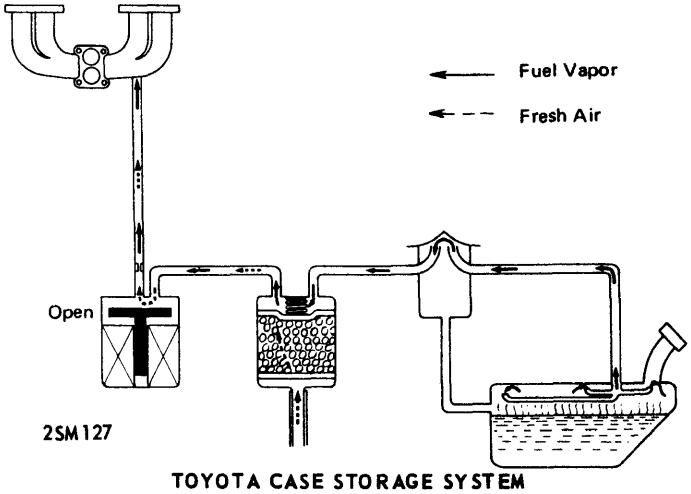
Fuel Evaporation

1972 TOYOTA

Carina (2T-C Engine)
Celica (18R-C Engine)
Corolla 1200 (3K-C Engine)
Corolla 1600 (2T-C Engine)
Corona & Corona MK II (18R-C Engine)
Crown (4M Engine)
Land Cruiser (F Engine)
Hi Lux (18 R-C Engine)

DESCRIPTION

Toyota Case Storage System is designed to prevent fuel vapors from entering the atmosphere by use of a modified fuel tank with a sealed filler cap and a venting system consisting of a Thermal Expansion Tank, a Vacuum Switching Valve, an Activated Charcoal Canister and a Check Valve (used on some models). *NOTE – Corolla models have expansion tank built into fuel tank and check valve installed on fuel tank. For particular model, see individual schematic illustrations.*



TOYOTA CASE STORAGE SYSTEM
(ABOVE 15 MPH)

OPERATION

When vehicle is stopped, idling or running at low speed, the vacuum switching valve is closed and fuel vapor (produced in fuel tank) travels through the vapor line to the charcoal canister where it is adsorbed by activated charcoal. At speeds above 15 MPH, the vacuum switching valve opens. Fresh air is drawn into the carbon canister. This air mixes with the fuel vapors and both are drawn into the intake manifold where they enter the combustion system and are burned. This action purges the charcoal and renews its storage capacity.

TROUBLE SHOOTING

Fuel Odor or Gas Leaks – Disconnected or cracked fuel vapor line or defective components in case storage system. Check all lines and fittings and check operation of system.

Fuel Tank or Expansion Tank Deformed – Canister clogged, fuel filler cap defective (valve will not open) or hoses clogged.

Rough Engine (Corolla Models) – Defective check valve. If check valve is defective, fuel may flow into vapor line.

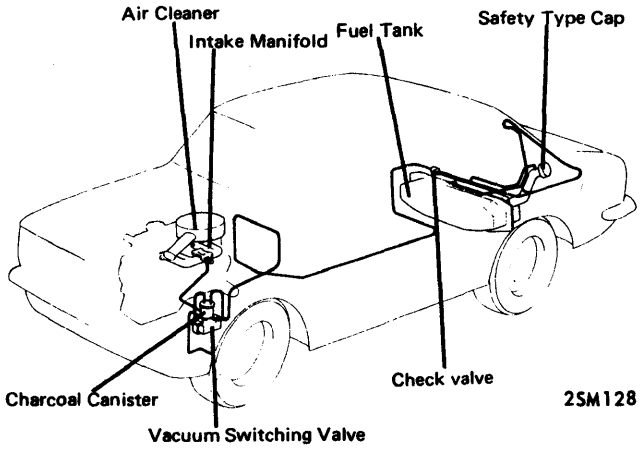
Vapors Will Not Pass To Manifold At Speeds Above 15 MPH – Hose or pipe collapsed. Defective vacuum switching valve. Defective computor or speed marker. Defective speed sensor.

TESTING

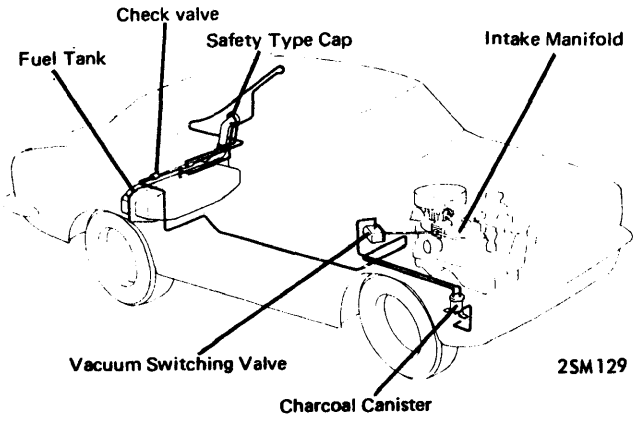
Vacuum Switching Valve – Raise rear wheels. Disconnect hose from canister to vacuum switching valve. Connect a vacuum gauge to vacuum switching valve. Check for vacuum when vehicle speed exceeds 15 MPH. If there is no vacuum, refer to testing procedures in "Toyota T.C.S. System" in EXHAUST EMISSION section.

MAINTENANCE

Check charcoal canister storage system pipes, hoses and connections every 6,000 miles. Check charcoal canister every 12,000 miles, replace canister every 5 years. Replace fuel tank filler cap gasket every 24 months or 24,000 miles. Replace fuel vapor check valve every 12,000 miles.



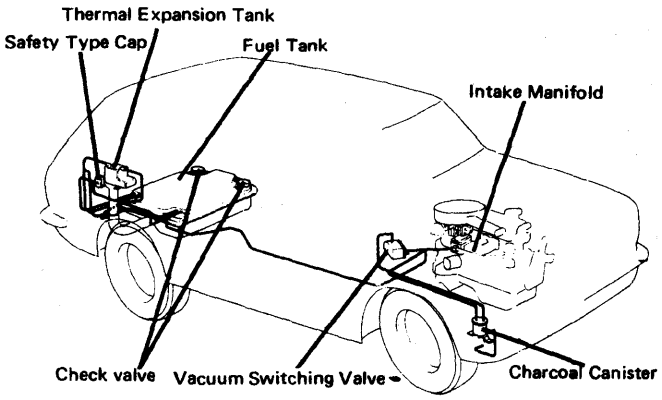
TOYOTA COROLLA SEDAN (1200 ENGINE)



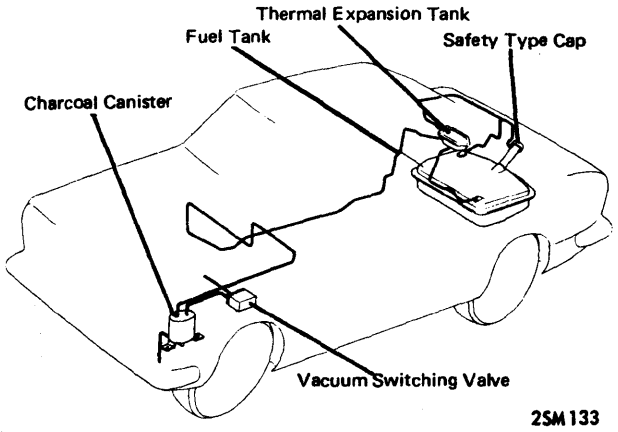
TOYOTA COROLLA SEDAN (1600 ENGINE)

1972 TOYOTA (Cont.)

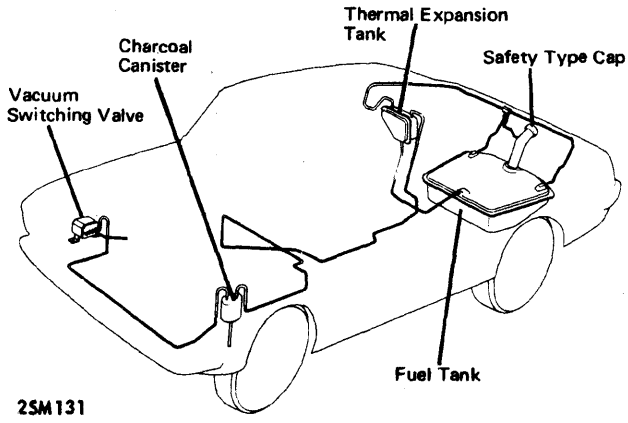
2SM130



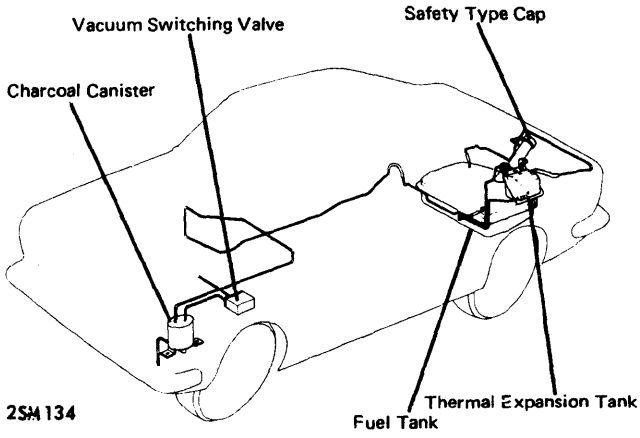
TOYOTA COROLLA STATION WAGON (1600 ENGINE)



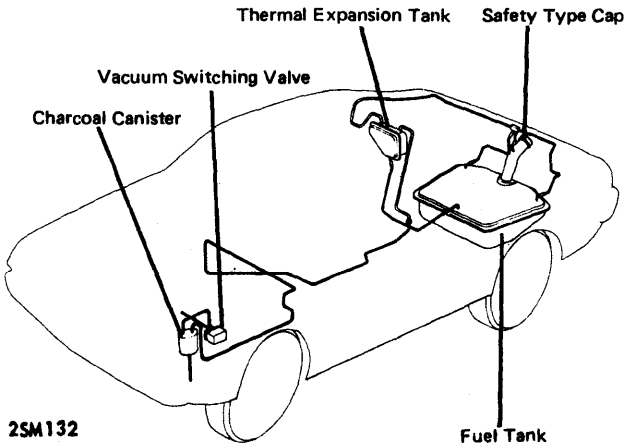
TOYOTA CORONA SEDAN



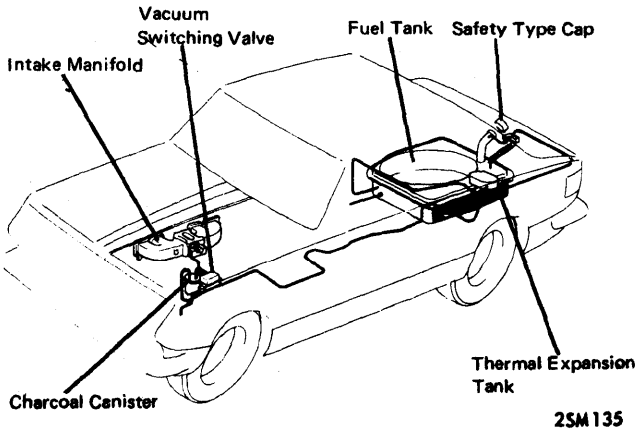
TOYOTA CARINA



TOYOTA CORONA HARD TOP



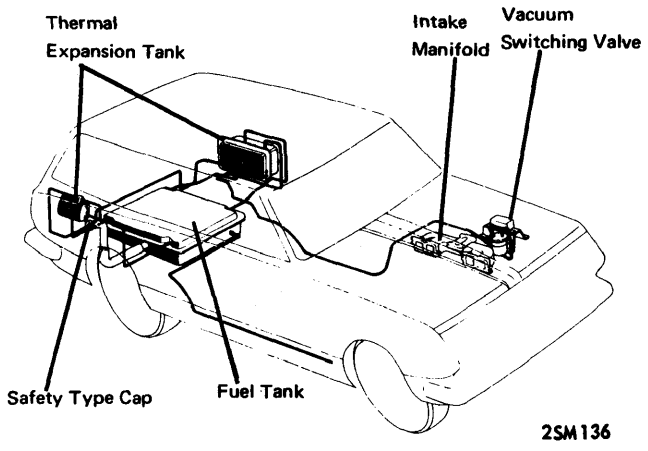
TOYOTA CELICA



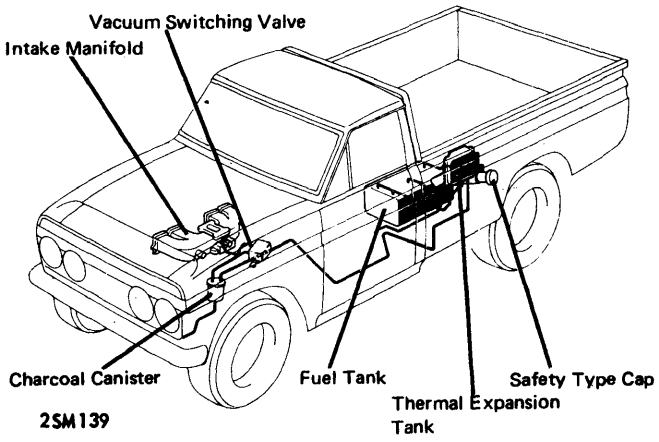
TOYOTA CORONA MARK II SEDAN & HARD TOP

Fuel Evaporation

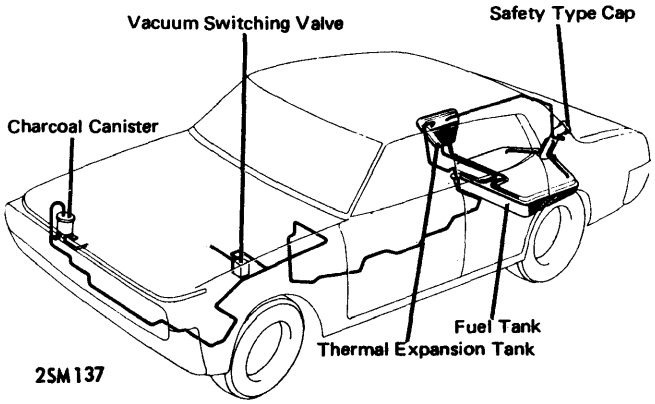
1972 TOYOTA (Cont.)



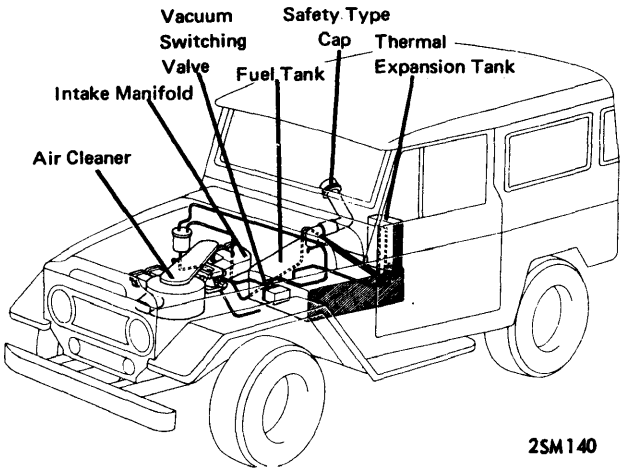
TOYOTA CORONA MARK II STATION WAGON



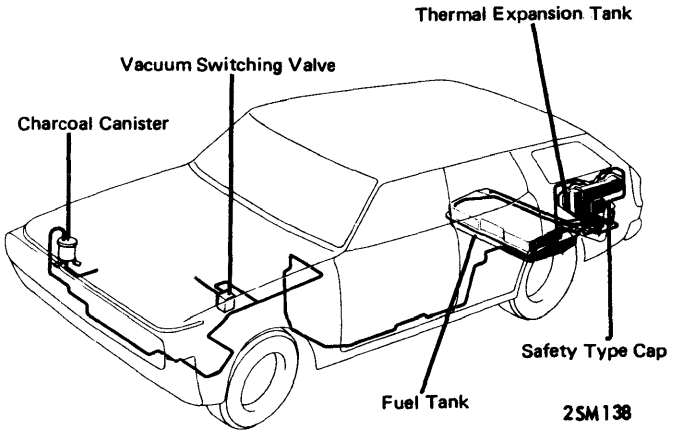
TOYOTA HI LUX



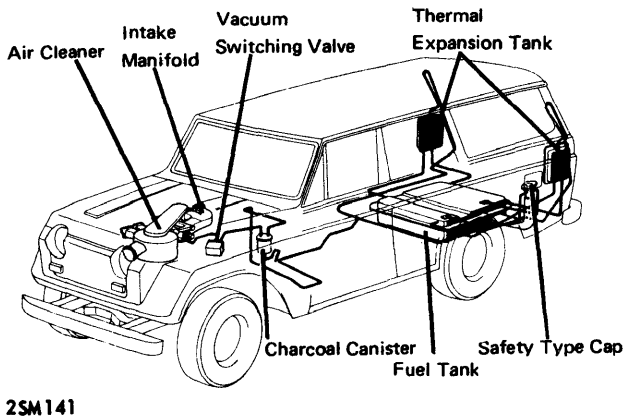
TOYOTA CROWN SEDAN & HARD TOP



TOYOTA LAND CRUISER HARD TOP & SOFT TOP



TOYOTA CROWN STATION WAGON



TOYOTA LAND CRUISER STATION WAGON