

1974-79 EXHAUST EMISSION SYSTEMS

Datsun Fuel Evaporation

All Models

DESCRIPTION

On 260Z, system consists of fuel tank, a positive sealing filler cap, vapor-liquid separator, carbon canister with purge control valve, and a vacuum signal line. On all other models, system consists of fuel tank, a positive sealing filler cap, vapor-liquid separator, flow guide valve, and 3 vapor vent lines.

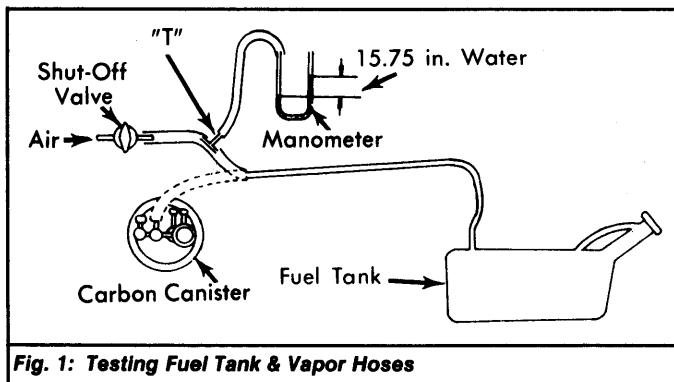
OPERATION

Fuel vapors from the sealed fuel tank are led into the carbon canister. Canister is filled with activated charcoal to absorb the fuel vapors when the engine is stopped or idling. As throttle valve opens and vehicle speed increases, vacuum opens the purge control valve and fuel vapors are sucked from canister into intake manifold.

TESTING

FUEL TANK & VAPOR HOSES

- 1) Check all hoses and fuel tank filler cap. Disconnect vapor hose connecting vapor-liquid separator with carbon canister. Connect a "T", manometer and shut-off valve to end of vent hose.
- 2) Supply air pressure to shut-off valve until manometer indicates 15.75 in. water. Close shut-off valve. Fuel tank and hoses should hold pressure within .98 in. (1.10 in. on F10 models) for 2 1/2 minutes. If pressure does not hold, repair or replace components as necessary.



PURGE CONTROL VALVE

Disconnect vapor hose from carbon canister at "T" fitting. Draw vacuum on vapor hose, there should be no leak. If valve does leak, remove purge valve and check for a damaged or cracked diaphragm, replace as necessary.

CHECK VALVE

200SX, 210, 510, & Pickup - Disconnect hoses and blow through valve at fuel tank inlet side. There should be significant resistance. Repeat on engine inlet side of valve. Air should flow freely through valve. Replace valve if it fails this test.

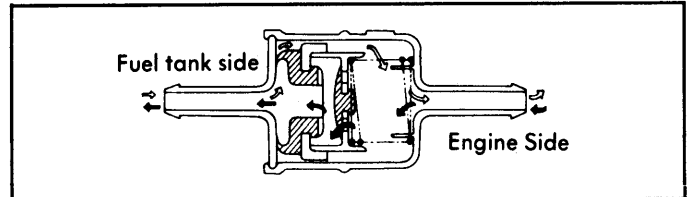


Fig. 3: Check Valve (200SX, 210, 510, Pickup)

280ZX, 310, 810 - 1) Remove valve. Draw air through port "A" of valve. See Fig. 4. Apply at least 1.46 in. Hg. A constant air flow should be felt. No air should be felt below this point.

2) Draw air through port "B" of valve. Apply at least 0.59 in. Hg. A constant air flow should be felt. No air should be felt below this point.

3) Continue drawing air through port "B" and seal port "A" with finger. Apply at least 1.38 in. Hg. A constant air flow should be felt. No air flow should be felt below this point. If valve does not test as indicated, replace valve.

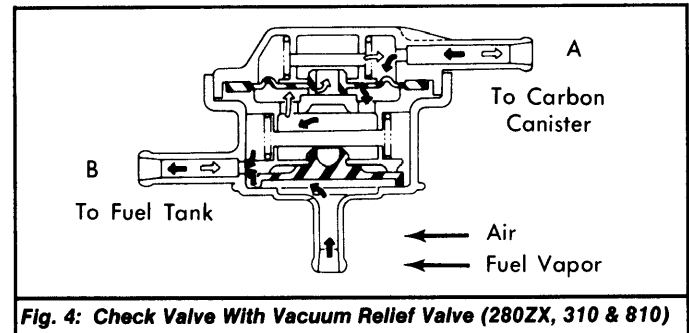
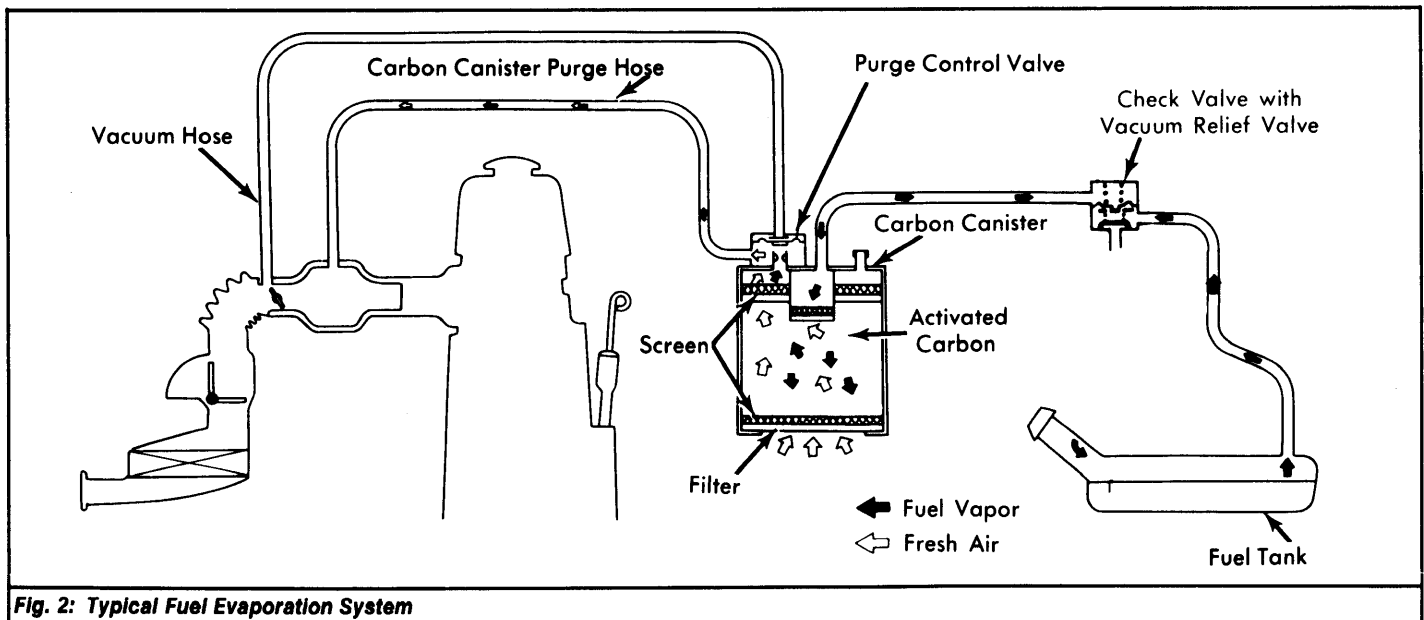


Fig. 4: Check Valve With Vacuum Relief Valve (280ZX, 310 & 810)



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Datsun Fuel Evaporation (Cont.)

AIR VENT CLEANER

F10 - Disconnect hoses and blow air through port "T". Air should flow through port "E" only. Plug port "E" or "T", then attempt to draw air through port "E" or "T" (whichever is not plugged). Air flow (with slight resistance) should be felt at port "A". Air vent cleaner should be replaced if it does not test as indicated.

MAINTENANCE

Inspect fuel tank and sealed filler cap every 30,000 miles or 24 months. Inspect vapor hoses and purges hoses every 30,000 miles or 24 months. Replace carbon canister every 30,000 miles or 24 months.