1974-79 EXHAUST EMISSION SYSTEMS
Honda Fuel Evaporation

All Models

DESCRIPTION

System prevents gasoline vapors from escaping into the atmosphere from fuel tank and carburetor. System consists of vacuum hoses, a pressure/vacuum relief fuel filler cap, a fuel tank with a built in expansion chamber, a liquid/vapor separator, a two-way valve, a charcoal canister, a purge control solenoid valve, and air vent cut-off diaphragms (if equipped).

OPERATION

Fuel vapor is stored in expansion chamber in fuel tank and in vapor line up to two-way valve. When vapor pressure becomes higher than set pressure of two-way valve, valve opens allowing vapor into charcoal canister. When vacuum exceeds set pressure of one-way valve or two-way valve, valve opens and air is drawn through charcoal canister into fuel tank.

When engine is stopped, purge control solenoid valve is closed and fuel vapor is absorbed by charcoal. When ignition switch is turned on, the solenoid valve opens, allowing stored vapors to enter carburetor as carburetor vacuum increases.

The vacuum-operated carburetor vent valves close when engine is turned off, directing fuel vapor in float chambers into the charcoal canister. Any excessive pressure or vacuum build-up is relieved by valves in the filler cap.

TESTING

PURGE CONTROL SOLENOID VALVE

Civic CVCC, Accord & Prelude - **1)** Disconnect carburetor port hose from solenoid valve and attach hand-held vacuum pump to valve. *See Fig. 2.*

NOTE: The two hoses on vacuum holding valve, located on top of solenoid valve, must be pinched before performing the following operations.

2) With ignition off, apply 5 in. Hg vacuum. If vacuum does not hold steady, replace purge control solenoid valve and retest.
3) Turn ignition switch on. Vacuum should drop to zero. If vacuum remains, check for voltage at valve. If voltage is present, replace purge control solenoid valve. If not, check wiring and fuses.

TWO-WAY VALVE

1) Remove gas cap and hose leading from fuel tank to charcoal canister at canister. Use a "T" fitting to attach a hand vacuum pump and vacuum gauge to hose from fuel tank.
2) Slowly apply vacuum while observing gauge. Valve should open at 0.6-1.2 in. Hg (usually with an audible sound). If valve opens below or above this level, install new valve and retest.
3) Connect hoses to pressure side of pump and gauge. Slowly apply vacuum while observing gauge. Valve should open at 0.2-0.6 in. Hg vacuum. If valve opens below or above this level, install new valve and retest.

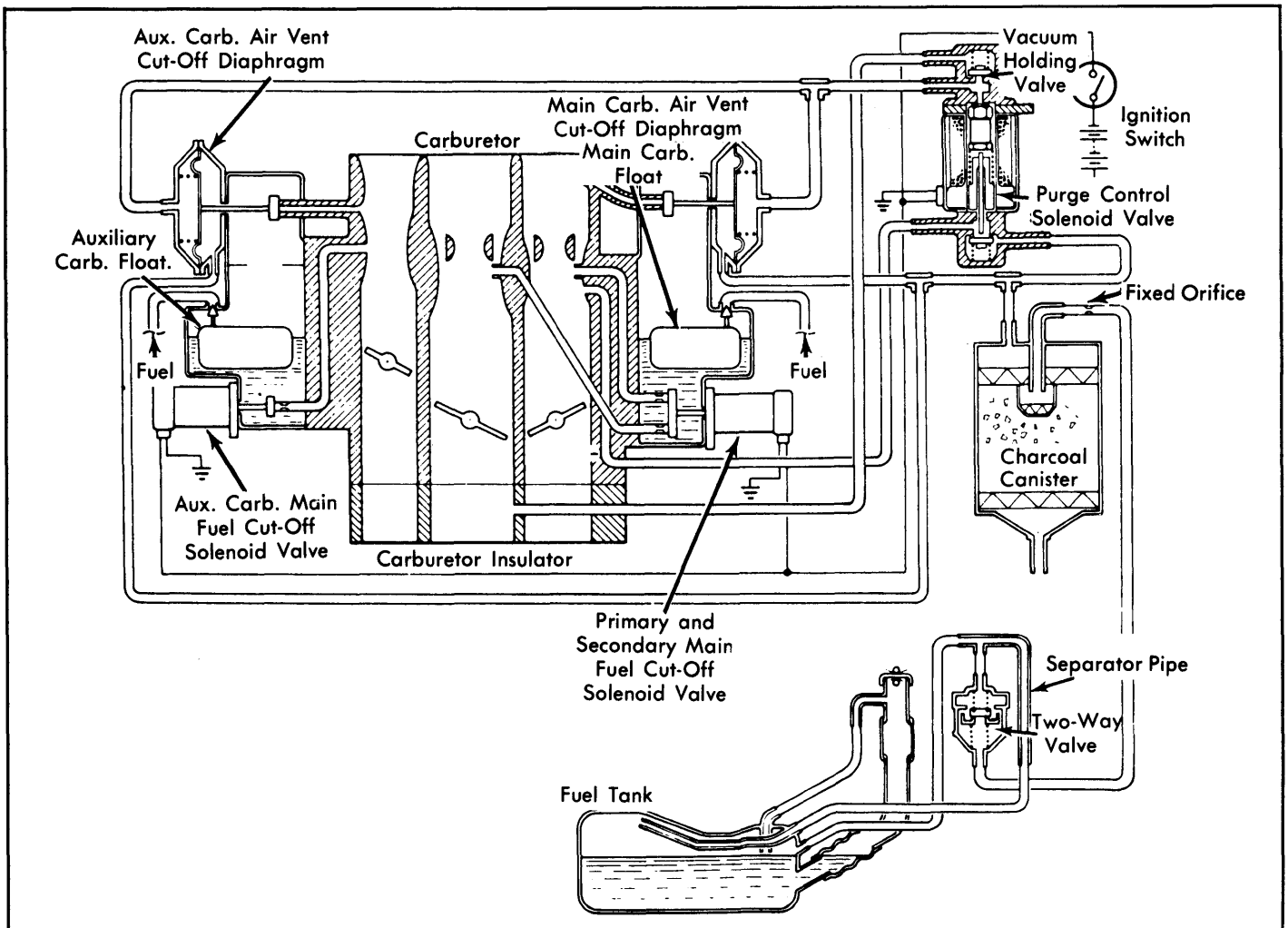

Fig. 1: 1975-79 Fuel Evaporation System (Civic CVCC, Accord & Prelude)

1974-79 EXHAUST EMISSION SYSTEMS
Honda Fuel Evaporation (Cont.)

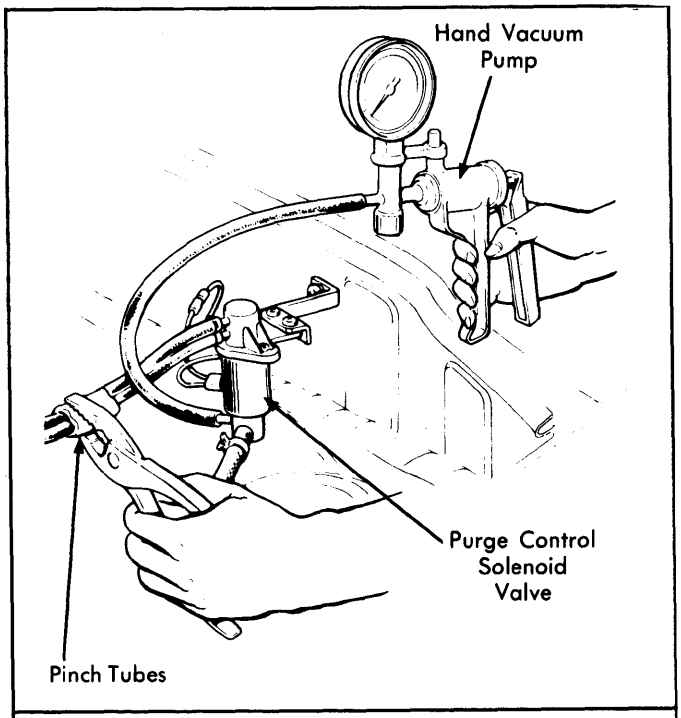

Fig. 2: Testing Purge Control Solenoid Valve

CHARCOAL CANISTER

1) Visually inspect canister and replace if damaged. Remove hose leading from purge control solenoid valve to canister at canister. Remove hose leading from carburetor to solenoid valve at solenoid valve and connect it to canister.

2) Remove gas cap. Disconnect purge air hose from bottom of canister. Start engine and raise speed to 3500 RPM. Place finger over purge air intake at canister and check for suction. If suction is not felt within 1 minute, replace canister and retest.

3) Install hand-held vacuum pump to fuel tank nipple on canister and apply vacuum. If vacuum holds, replace canister and retest.

AIR VENT CUT-OFF DIAPHRAGMS

Civic CVCC, Accord, & Prelude - 1) Disconnect lower hose on vacuum holding valve and "T" a vacuum gauge between hose and valve. Start engine and let idle.

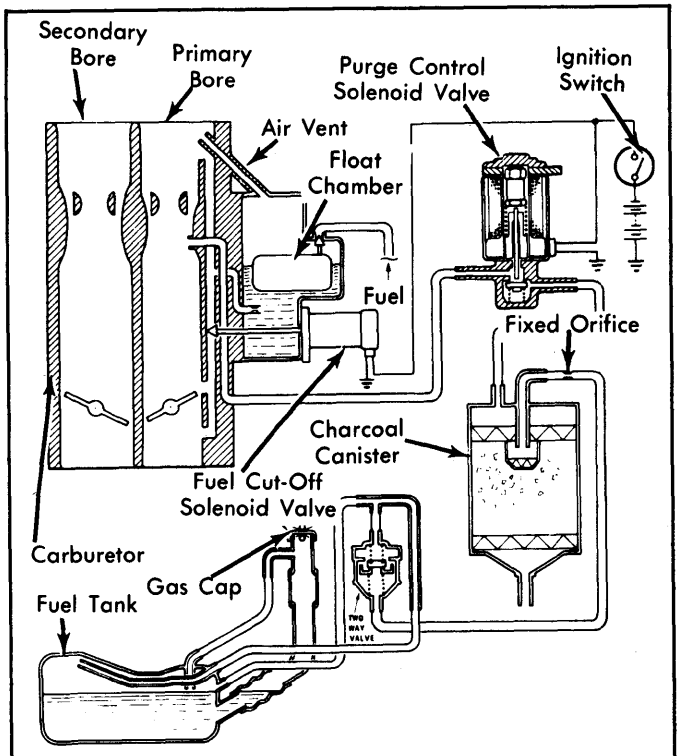

Fig. 4: Fuel Evaporation System (Civic 1200)

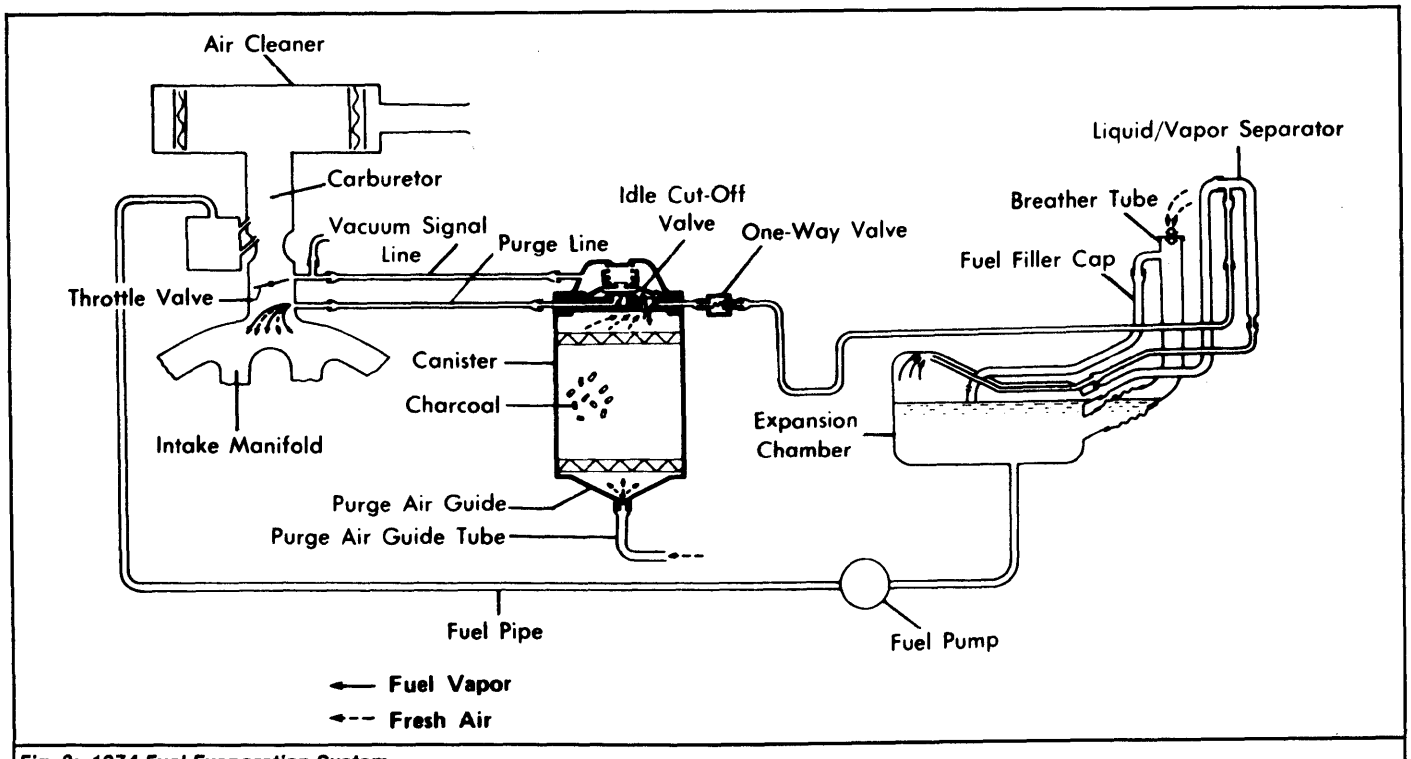

Fig. 3: 1974 Fuel Evaporation System

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Honda Fuel Evaporation (Cont.)

2) Gauge should indicate vacuum. If no vacuum exists, check for vacuum at top hose of holding valve. If vacuum exists at top hose, replace vacuum holding valve and recheck. If vacuum still does not exist, locate vacuum blockage and recheck.
3) Pinch tube between gauge and holding valve. Turn off ignition. Vacuum should remain stable. If vacuum decreases, pinch hose between each air cut-off valve in turn to locate leaking diaphragm. Replace and retest.
4) Start engine, let idle for 30 seconds, and turn engine off. Vacuum should drop to zero. If vacuum does not drop, replace purge control solenoid valve and retest.

MAINTENANCE

Every 15,000 miles, inspect all hoses and test system. Every 30,000 miles, replace charcoal canister.