

Evaporative Emissions - Evaporative Emissions

Description and Operation

To reduce the emission of fuel vapour, the fuel tank is vented to atmosphere through activated charcoal adsorption canister (s) which collects the fuel droplets. The charcoal is periodically purged of fuel when the EVAP Canister Purge Valve opens the vapour line between the canister(s) and the air intake induction elbow. This action allows manifold depression to draw air through the canister atmospheric vent, taking up the deposited fuel from the charcoal adsorber and burning the resulting fuel vapour in the engine.

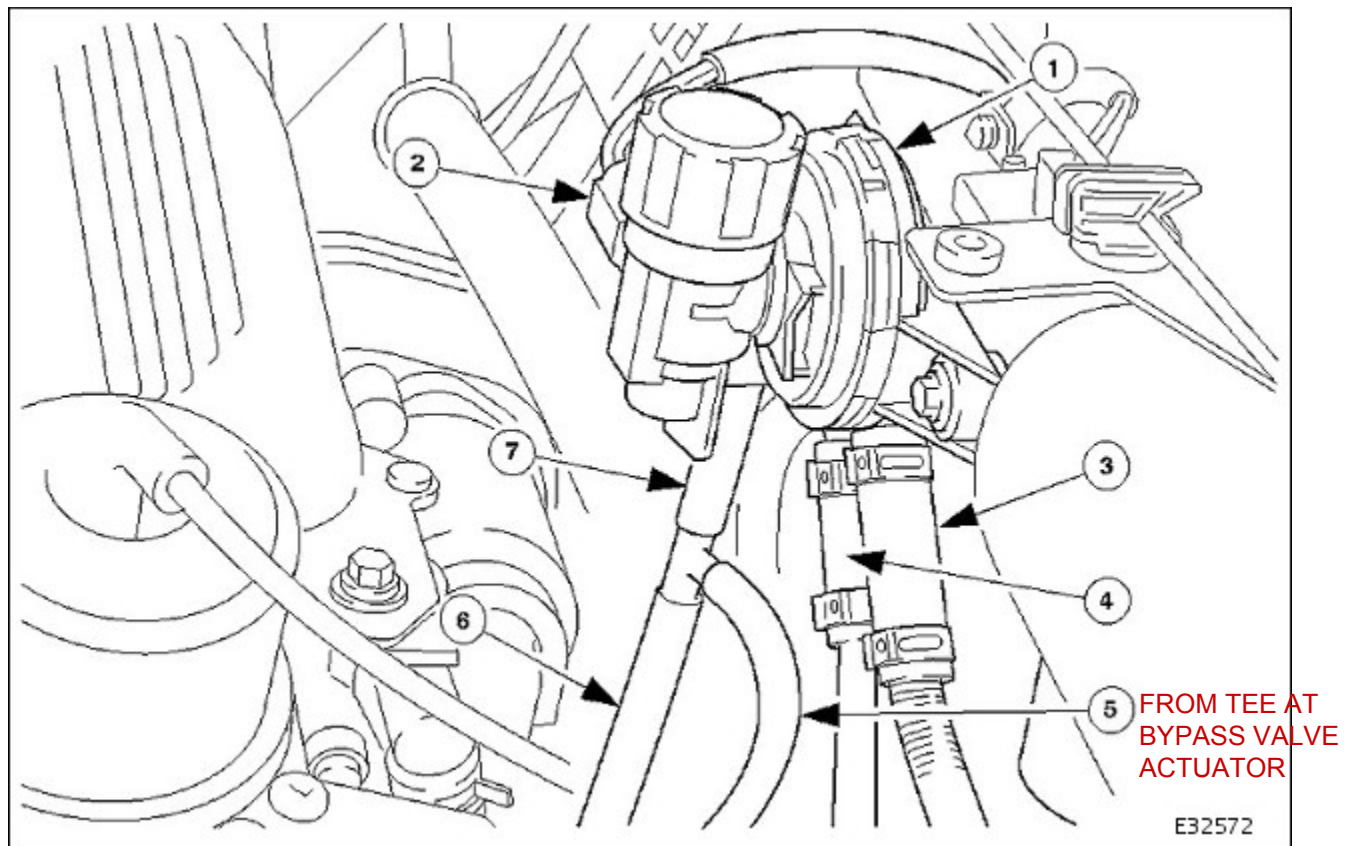
The EVAP Canister Purge Valve is controlled by the engine management system ECM. Purging is carried out in accordance with the engine management fueling strategy (see below).

The fuel tank vapour outlet is via a removeable flange assembly on the top surface of the tank. The vapour storage canister or canisters are fitted on the underside of the vehicle below the rear seats.

There are three variants of the evaporative system. All systems use the charcoal adsorber storage canisters and purge valve and operate as described above. The specific features of each system are described below. The evaporative systems are designated as :

- single canister system
- running loss system
- running loss with On-board Re-fueling Vapour Recovery (ORVR) system

EVAP Canister Purge Valve



Item	Part Number	Description
1	—	EVAP canister purge valve
2	—	Valve solenoid connector
3	—	Vapour outlet to induction elbow
4	—	Vapour inlet from canister(s)
5	—	Vacuum control pipe from induction elbow
6	—	Vacuum control pipe to vapour pressure control valve - applicable to single canister systems only
7	—	Vacuum control connection to EVAP valve