

SECTION 303-08C Engine Emission Control — Hybrid

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DESCRIPTION AND OPERATION

Engine Emission Control

NOTE:

Do not permanently remove or render inoperative any part of the vehicle emission control system including related hardware. Failure to comply may violate applicable state and federal law.

The engine emission control system consists of the:

- EGR system.
- PCV system.

EGR System

The EGR system returns a small amount of exhaust gas into the intake manifold. This reduces the overall combustion temperature. Cooler combustion temperatures provide a significant reduction of the Nitrogen Oxides (NOx) in the exhaust emissions.

The engine incorporates a stepper motor-controlled EGR valve which receives its signal from the PCM. Engine coolant is used to cool the EGR valve. The EGR valve and stepper motor are serviced as an assembly.

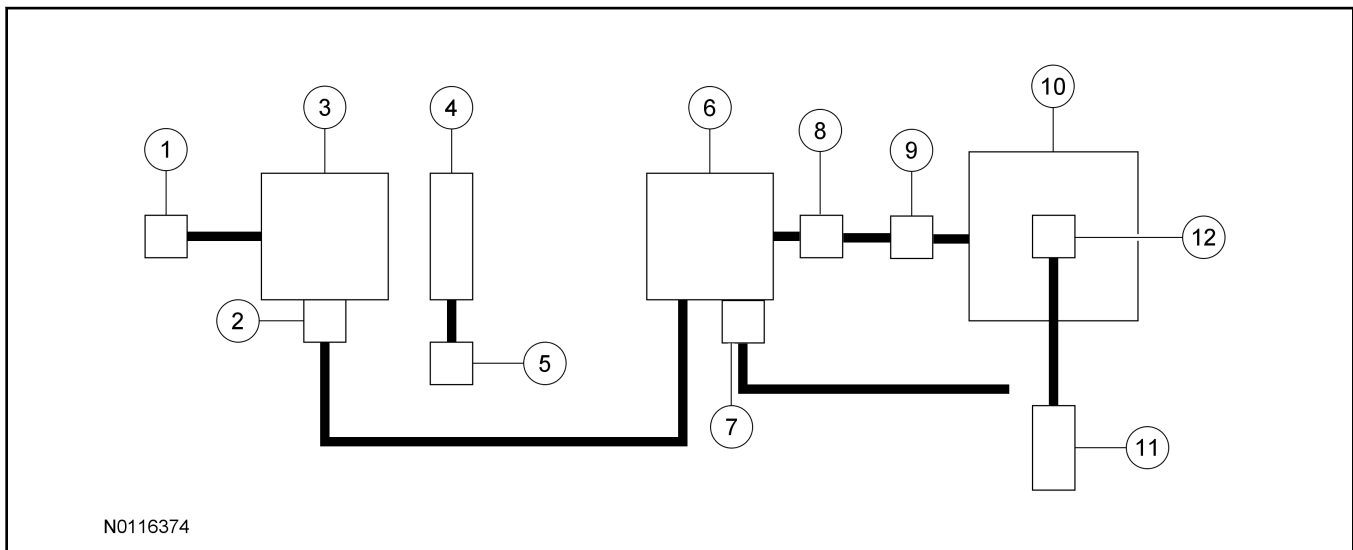
The amount of recirculated exhaust gas depends on:

- engine rpm.
- intake manifold vacuum.
- exhaust backpressure.
- engine coolant temperature.
- throttle position.

PCV System

The PCV system uses intake manifold vacuum to ventilate blow-by vapors from the crankcase and return the vapors to the intake manifold for combustion. The PCV valve varies the amount of blow-by vapors returned to the intake manifold based on available engine vacuum. The PCV valve also prevents the entry of combustion backfiring into the crankcase. The PCV valve is serviced as part of the crankcase vent oil separator.

Vehicle Emission Vacuum Routing



Item	Part Number	Description
1	—	PCV valve (part of 6A785)
2	9G641	Evaporative Emission (EVAP) canister purge valve
3	9424	Intake manifold
4	6582	Valve cover
5	9B642	Air Cleaner (ACL) outlet pipe
6	9E857	EVAP canister

DESCRIPTION AND OPERATION (Continued)

Item	Part Number	Description
7	9F945	EVAP canister vent solenoid
8	9G712	Fuel vapor vent valve
9	—	Fuel Tank Pressure (FTP) sensor (part of 9D668)
10	9002	Fuel tank
11	9034	Fuel tank filler pipe
12	9H307	Fuel Pump (FP) module