

1986 - 1987 Corvette: Service Bulletin: Service Engine Soon Light - Code 36 PFI Engines (VIN Codes F and 8)

Model Year: 1986-87 CAMARO, CORVETTE WITH PFI ENGINES (VIN CODES F AND 8)

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TO: ALL CHEVROLET DEALERS

CONDITION: There have been reports of Code 36 being set on 1986-87 Camaro, Corvettes with 5.0/5.7L PFI engines because of a plugged crankcase vent tube or faulty MAF power or burn-off relays.

CRANKCASE VENT TUBE:

The illustration shows the engine vent tube that has been found blocked. The fresh air intake should be free from obstructions from the throttle body into the valve rocker cover.

RELAYS:

----- In order for the burn-off cycle to properly take place, it is essential that the proper voltage be available to the MAF sensor during the burn-off cycle, which takes place after engine shutdown. The proper voltage must be available at terminal "E" (12 volt power circuit) of the MAF sensor as well as at terminal "D" (the burn-off signal circuit) . To test for the proper voltage, the circuit must be tested without disconnecting any of the components. Because relay contacts create essentially a piece of wire when closed, there should not be any voltage drop between the input and the output terminals of the relay. If the diagnostic chart for Code 36 indicates the problem is intermittent or Code 36 still exists after making a repair, the following test should be performed:

With the relays still connected, connect a digital voltmeter between the proper burn-off relay terminal (circuit 994) and a good ground. Refer to Section 6E3 of the Service

Manual for determining which burn-off relay terminal is used for burn-off (Circuit 994).

NOTICE: ON 1987 CORVETTES WITH SEAL CONNECTORS, IT WILL BE NECESSARY TO INSTALL JUMPER WIRES WHEN TESTING FOR CIRCUIT VOLTAGES.

To properly test for a faulty relay, it will be necessary to establish the conditions for the burn-off cycle to occur. This can be accomplished by grounding the diagnostic test terminal (ALDL Pin B) and observing the "Service Engine Soon" light until the light indicates the system is in closed loop. After closed loop is confirmed, unground the diagnostic terminal, turn the ignition off, and observe the voltmeter reading.

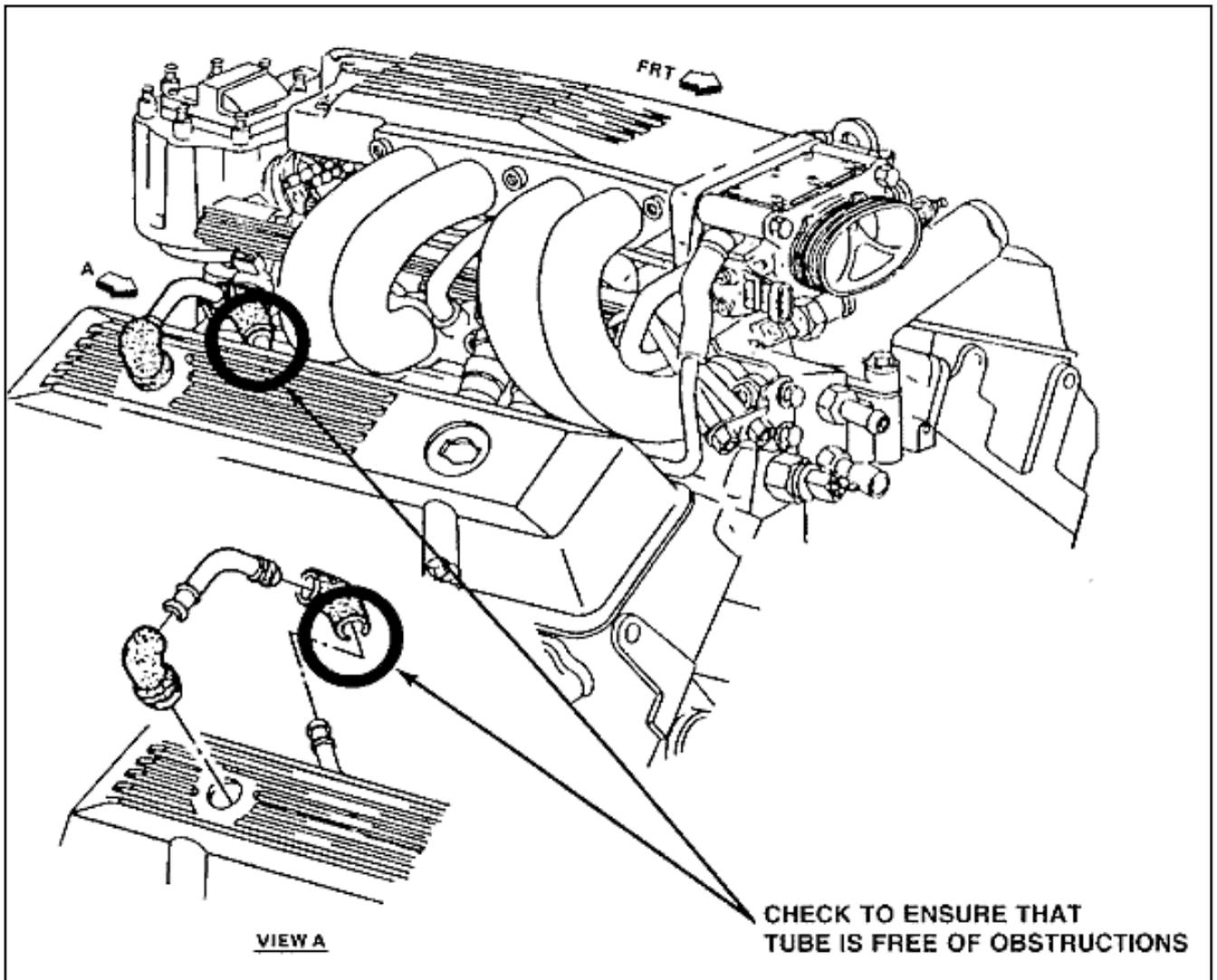
Observe the following voltmeter sequence immediately after engine shutdown:

About 5 seconds after engine shutdown, the ECM should energize the burn-off relay for about 1 second, and during this period there should be 10-12 volts coming out of the burn-off relay (Circuit 994). After the 1 second period, the voltage should go back to 0 volts. If the output voltage of the relay is less than 10 volts when energized, the relay should be replaced.

If the voltage is correct coming out of the burn-off relay, repeat the test on the MAF power relay (Circuit 993). The normally closed contacts of the power relay are used for the burn-off cycle, and the power is supplied from the burn-off relay. As with the burn-off relay the output voltage during the 1 second burn-off period should be above 10 volts or the relay is faulty. The resistance across the closed contacts of the MAF power relay should also be checked using an ohmmeter. (Refer to the service manual for properly identifying the correct relay terminals). The resistance should be less than 1 OHM across the closed set of contacts. If the resistance is greater than 1 OHM, replace the relay.

Labor Operation Number: T1212

Labor Time : 0.6 Hours



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