2007-2008 Solstice/Sky 2.0 Turbo ECM Removal

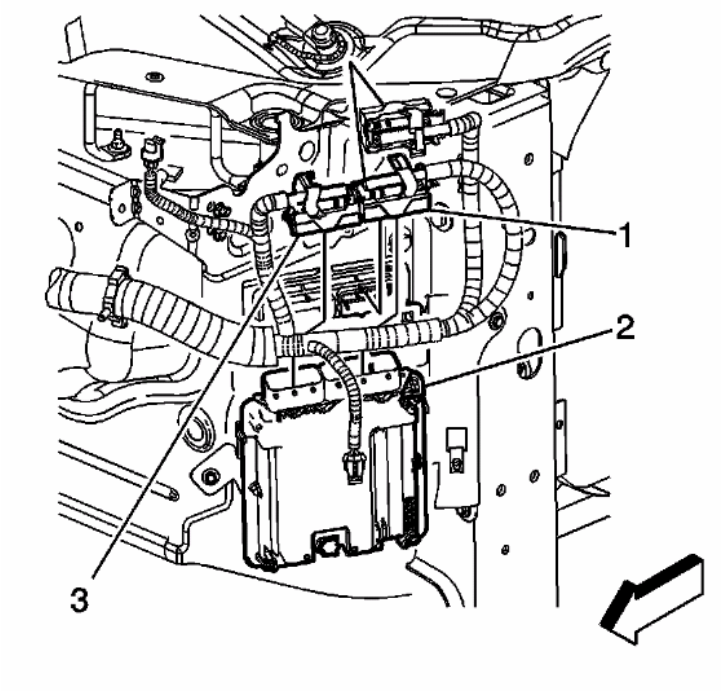
Engine Control Module Replacement

Notice:

- Turn the ignition OFF when installing or removing the control module connectors and disconnecting or reconnecting the power to the control module (battery cable, powertrain control module (PCM)/engine control module (ECM)/transaxle control module (TCM) pigtail, control module fuse, jumper cables, etc.) in order to prevent internal control module damage.

- Control module damage may result when the mental case contacts battery voltage. DO NOT contact the control module metal case with the battery voltage when servicing a control module, using battery booster cables, or when charging the vehicle battery.

- In order to prevent any possible electrostatic discharge damage to the control module, do not touch the connector pins or the soldered components on the circuit board.



- Remove any debris from around the control module connector surfaces before servicing the control module. Inspect the control module connector gaskets when diagnosing or replacing the control module. Ensure that the gaskets are installed correctly. The gaskets prevent contaminant intrusion into the control module.

Turn the ignition OFF.

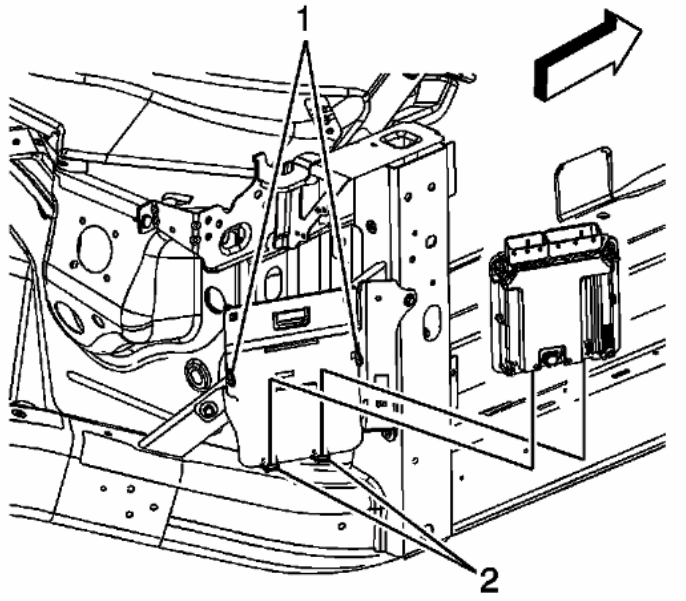
Disconnect the negative battery cable.

Disconnect the engine harness electrical connectors (1, 3) from engine control module (ECM).

Release the upper and lower retaining tabs (1, and 2) using a small screwdriver or other suitable tool.

Remove the ECM by lifting upward after releasing the tab.

Installation is in reverse order of disassembly.



TECHNICAL

SUBJECT:

- Engine Will Not Crank After A Battery Disconnect, Dead Battery Condition Or After A Reprogramming Event, Theft Deterrent Light Illuminated, DTC B3060 Stored, One Key Starts Vehicle But Second One Does Not (Reprogram Keys Into Theft Deterrent Module).

MODELS:

- 2006 Chevrolet Cobalt
- 2006 Pontiac Pursuit (Canada Only), Solstice
- 2007 Saturn SKY Built prior to June 30, 2006

CONDITION:

- Some customers bay comment on the following conditions after experiencing a loss of battery power in their vehicle. Technicians may encounter a vehicle with the following conditions after disconnecting a battery during a service procedure or after reprogramming any module on the vehicle.
- The engine will not crank using the key the customer currently has in their possession.
- If the customer has both keys, one key starts the vehicle but the vehicle will not crank using the second key. The Theft Deterrent Light may be illuminated during the no crank condition.
- Technicians may find Diagnostic Trouble Code (DTC) B3060 (Unprogrammed Transponder Identification Code Received) stored as a current or a history code.

CAUSE:

- This condition may be caused by the failure of the key programming information for both keys to be permanently stored in the Theft Deterrent Module (TDM) during the vehicle assembly process. The information for one key is stored permanently while the information for the other key will be lost if the vehicle's battery voltage drops below 7.8 volts.
- The failure condition will also occur when the key programming information for one of the vehicle's keys is lost after a battery disconnect during a service procedure, a dead battery condition or after a reprogramming event for any module and the key that has lost its programming is used to start the vehicle. The vehicle's other key programming information will not be lost due to the loss of battery voltage or a reprogramming event and that key will still start the vehicle. It may also be possible to unknowingly render the customer's second key inoperative after a battery disconnect or a reprogramming event performed during other service procedures on the vehicle.
- It is recommended that the customer be asked for both keys to their vehicle when their vehicle is brought in for any service requests in which a battery disconnect or reprogramming event will occur. Technicians should verify that both keys work before returning the vehicle to the customer.

Replacing Keys Procedure 30 minute Relearn

Important:
Use this procedure when replacing vehicle keys. If a working master key is available, use the Adding Keys. This procedure is not available on vehicles equipped with export or Canadian configured TDMs.

When performing the 30-minute relearn procedure, all previously learned keys will be erased from the TDM memory. Additional keys may be learned after performing the relearn procedure.

1. With a master vehicle key, turn ON the ignition, with the engine OFF>
2. Observe the security indicator. After **approximately 10 minutes**, the telltale will turn OFF.
3. Turn OFF the ignition, and wait **5 seconds**.
4. Repeat steps 1-3 two more times for a total of 3 cycles or **30 minutes**
5. Turn key to the OFF position.
6. With a master vehicle key, start the vehicle. The vehicle has not learned the key transponder information and/or the ECM has now learned the fuel continue password.
7. If additional keys are required to be learned, refer to Adding Keys.
8. With a scan tool, clear any DTCs.