Electronic Control Module Installation
GM Vehicles

Installing an ECM yourself is pretty easy. This guide lists the proper way to install an ECM when you have purchased a pre-programmed, "plug and play" ECM from All Computer Resources.

Failure to fix and/or replace any bad components or connections within the vehicle can damage the new ECM and void the warranty. ECM's rarely fail on their own, please perform any necessary repairs before installation.

Before Installing ECM make sure that:

- Battery is charged over 12V

- Wiring harness is clean and in good condition

- Any known defective parts have been replaced

- All ground connections are in good condition and tightly secured

- Read and follow TechTalk bulletins ACR001-ACR003

ECM Installation:

1. Disconnect Negative terminal from battery

2. Let the vehicle sit for Thirty (30) minutes unplugged

3. Install the new ECM (Be sure the connectors are inserted firmly)

4. Connect ground wires back to ECM (If applicable)

5. Reconnect the battery

6. Refer to GM Key relearn procedure on the following pages.

Note: If you are experiencing drivability issues please refer to Tech Talk bulletins ACR004 & ACR006. If your Check engine light stays illuminated, reset codes and follow the installation again. If the codes remain, the ECU is notifying you that there are issues with the vehicle that must be corrected.

GM Vehicle Theft Deterrent (VTD) Relearn Procedures

GM Vehicles have three different types of Vehicle Theft Deterrent (VTD) systems, each of which require their own relearn procedure. Unless these procedures are performed properly your vehicle will not start after installing the new PCM. The three systems are:

1) Passkey, Passkey II & VATS - resistive chip ignition key

2) Passlock - coded lock cylinder

3) Passkey III & III+ - transponder ignition key.

Refer to the keys below and identify which system (key) your GM vehicle has. The following sections describe how to execute the relearn procedures for each VTD system; feel free to skip to the section that matches your VTD key.
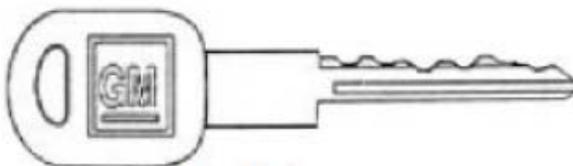
How to tell which system you have – Look at the keys. VATS is not shown, but very similar to Passkey and Passkey II.
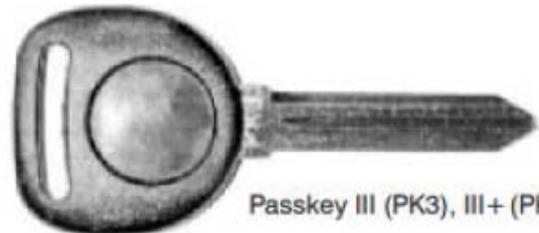
Passkey, Passkey II (PK2)

Passkey III (PK3), III+ (PK3+)

Passklock

Passkey III (PK3), III+ (PK3+)

Passkey, Passkey II & VATS Key Relearn

The following procedure takes approximately 35 minutes. Make sure the battery is fully charged before proceeding.
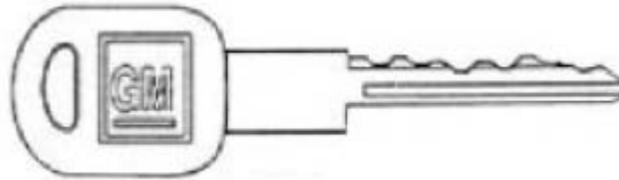
1. Insert key into the ignition switch and make sure it is in the 'OFF' position

2. Turn the ignition switch to the 'ON' position. (do not attempt to start the engine)

*Note: The security light will illuminate steady or flash for at least **11 minutes** then turn off.*

3. When security light turns off, turn the ignition switch 'OFF' for **thirty seconds.**

4. Repeat steps 2 & 3 twice, for a total of 3 times.

5. Turn the ignition to the 'START/RUN' position; the engine should start.

Passlock Key Relearn

The following procedure takes approximately 30 minutes. Make sure the battery is fully charged before proceeding.

1. Insert key into the ignition switch and make sure it is in the 'OFF' position

2. Turn the ignition switch to the 'START/RUN' position briefly (attempt to start the engine) and leave the key in the 'ON' position
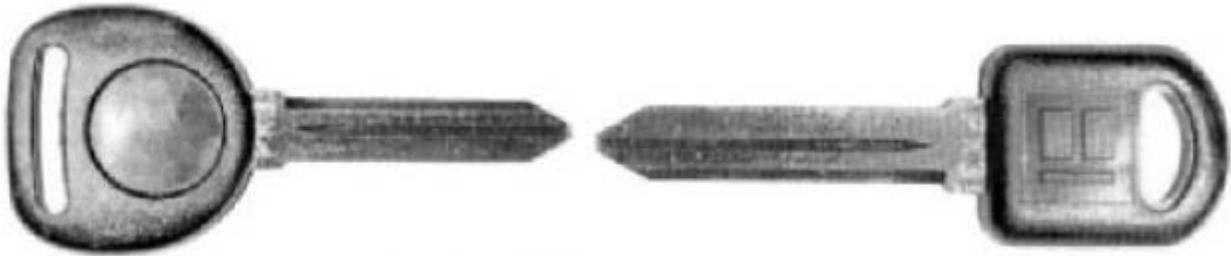
*Note: The security light will illuminate steady or flash for at least **10 minutes** then turn off.*

3. When security light turns off, turn the ignition switch 'OFF' for **5 seconds.**

4. Repeat steps 2 & 3 twice, for a total of 3 times.

5. Turn the ignition to the 'START/RUN' position; the engine should start.

Passkey III(PK3) Key Relearn

This procedure takes approximately 30 minutes. Make sure the battery is fully charged before proceeding.
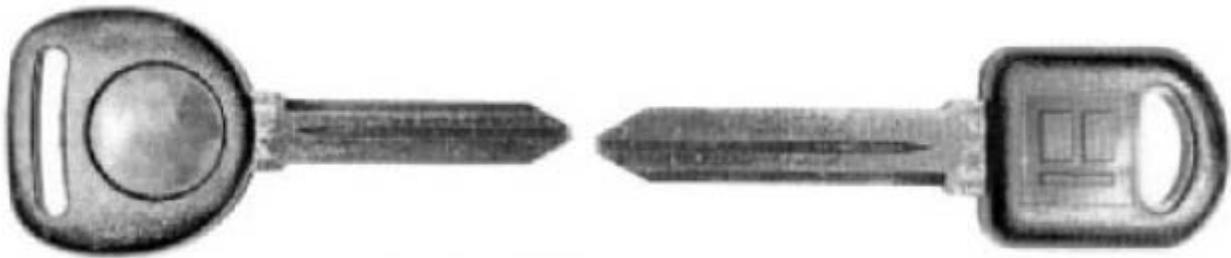
1. Insert key into the ignition switch and make sure it is in the 'OFF' position

2. Turn the ignition switch to the 'ON' position. (do not attempt to start the engine)

Note: The security light will illuminate steady or flash for at least 10 minutes then turn off. If the security light does not turn off after 15 minutes, disconnect battery for 5 minutes and refer to Passkey III+(PK3+) instructions on the next page.

3. When security light turns off, turn the ignition switch 'OFF' for **thirty seconds.**

4. Repeat steps 2 & 3 twice, for a total of 3 times.

5. Turn the ignition to the 'START/RUN' position; the engine should start.

Passkey III+(PK3+) Key Relearn

The following procedure takes approximately 30 minutes. Make sure the battery is fully charged before proceeding.

1. Insert key into the ignition switch and make sure it is in the 'OFF' position

2. Turn the ignition switch to the 'START/RUN' position briefly (attempt to start the engine) and leave the key in the 'ON' position

*Note: The security light will illuminate steady or flash for at least **10 minutes** then turn off.*

3. When security light turns off, turn the ignition switch 'OFF' for **5 seconds.**

4. Repeat steps 2 & 3 twice, for a total of 3 times.

5. Turn the ignition to the 'START/RUN' position; the engine should start.