Electronic Calibration Unit (Prom) Extraction and Replacement

The ignition should always be off when installing or removing the ECM connectors

Remove or Disconnect

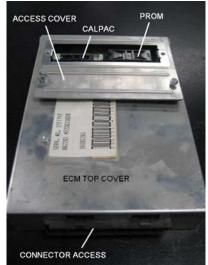
- Connectors from ECM
 ECM mounting hardware
 - Important: Electronic Control Module (ECM) mounting hardware not illustrated, hardware configuration will vary with car division.
- 3. ECM from passenger compartment

from PROM socket.

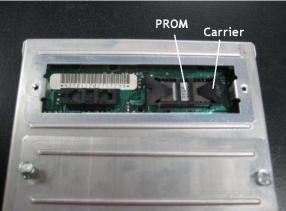
- 4. ECM access cover
- 5. PROM assembly
 - Without a PROM removal tool:Place fingers on both sides of the PROM and rock the PROM free



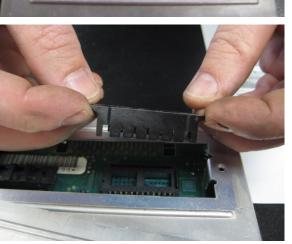
b)

















Using a rocker-type PROM removal tool:

Engage one end of the PROM carrier with the hook end of the tool. Press on the vertical bar end of the tool and rock the engaged end of the PROM carrier up as far as possible. Engage the opposite end of the PROM carrier in the same manner and rock this end up as far as possible. Repeat this process until the PROM carrier and PROM are free of the PROM socket. The PROM carrier with PROM in it should lift off of the PROM socket easily. Use of unapproved PROM removal tools or methods will cause damage to the PROM or PROM socket.

Procedure for Extracting EPROM from Chip Carrier

1. Hold chip upside down, thumbs on the side with the larger tabs.

2. Press tabs in slightly, bending pins, such that they release from the keepers in the tabs.

3. If necessary, use a razor blade to push the prongs away from the carrier.

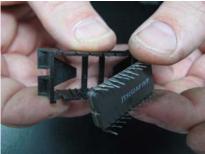
4. The chip should now pop out with the pins leaving the carrier first.

5. The chip should have a notch that matches up with the carrier notch.











Remove or Disconnect

New PROM mounted in PROM carrier out of its packaging and check the part number making sure it is the same as the one removed from the failed ECM. Do not remove PROM from carrier to confirm PROM correctness.

Install or Connect

Important (Before installing new PROM) Any time the PROM is installed backwards and the ignition switch is turned on, the PROM is destroyed 1. PROM in PROM socket

<u>Small notch of carrier must be aligned with small notch on PROM.</u> Press on PROM carrier until it is firmly seated in the socket. <u>Do not press on</u> <u>PROM; only the carrier.</u>

- 2. Access cover on ECM
- 3. ECM in passenger compartment
- 4. Connectors to ECM







Functional Check

- 1. Turn ignition on
- 2. Enter diagnostics
 - A. Code 12 should flash four times. (No other codes present.) This indicates the PROM is installed properly.
 - B. If trouble code 51 occurs or if the check engine light is on constantly with no codes, the PROM is not fully seated, installed backwards, has bent pins, or is defective.
- If not fully seated, press firmly on PROM carrier.
- If it is necessary to remove the PROM, follow instructions in appropriate steps.
- If installed backwards, REPLACE THE PROM.
- If pins bend, remove PROM, straighten pins, and reinstall. If bent pins break or crack during replacement, REPLACE THE PROM.

