CARDONE ProTech

Supporting Today's Professional Technician

Proper Installation of GM PROMs and MEMCALs

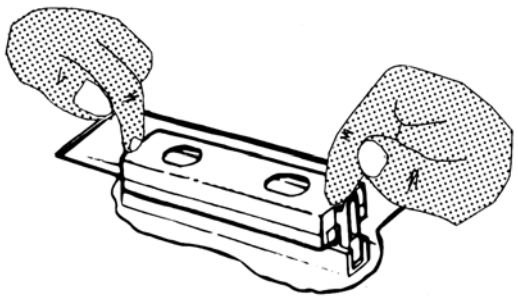
Application: GM vehicles equipped with "Surface Mount Technology" ECCs. CARDONE part numbers: 77-7165, 77-7730, 77-7748, 77-7749, 77-8253, 77-8321

Problem: ECC failure immediately during installation or shortly after

Cause: Excessive force applied to circuit board during installation of the MEM-CAL or cover.

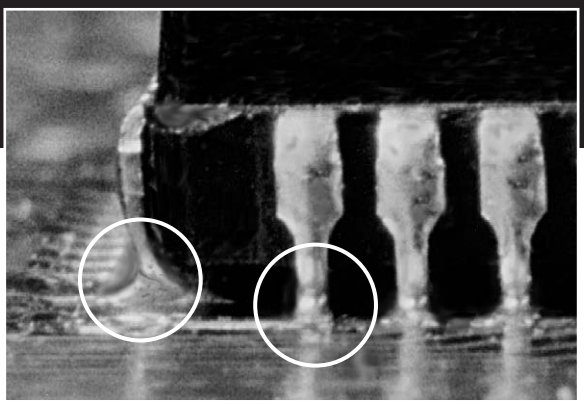
Solution:

- Remove cork spacer on top side of MEM-CAL if applicable.
- Align notches on MEM-CAL with notches on MEM-CAL socket.
- VERY GENTLY press down on ENDS of the MEM-CAL until clips are against the side of the MEM-CAL. Press clips inward until they snap into place.
- Install MEM-CAL cover and install replacement ECC in the vehicle.
- Perform all tests specified in instruction sheets supplied with each replacement unit. If "tap-testing" procedure is performed, use ***fingertips only***–any other method will cause ECC damage.

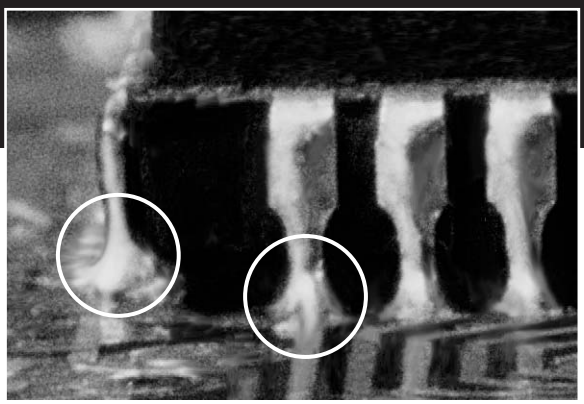


Note: Excessive force to circuit board due to improper installation will **VOID THE WARRANTY**.

ECCs may look the same, but at 20x magnification, the difference may shock you.



Competitor ECC



CARDONE (A-1) ECC

What's the difference? Compare the magnified views of the CARDONE circuit chip and the leading competitor chip. Notice how much thicker the "J" leads surrounding the CARDONE chip are. This detail may seem insignificant, but it determines whether or not your ECC sale will come back to bite you.

On a typical ECC board, there are about 400 "J" leads that provide electrical connections to the board. If just one of these connections breaks loose, the whole ECC can fail. And failure is inevitable if you have weak "J" leads. Corrosion, heat and vibration constantly attack them, causing the solder around the "J" leads to crack.

That's why CARDONE goes the extra mile with their soldering process. The solid mass created around each lead ensures stable electrical connections, even under adverse conditions.

But CARDONE doesn't stop there. Every ECC is 100% full-function tested under simulated on-the-car extremes of thermal shock and vibration. Then, every connector pin function is verified and loaded to exceed circuit specifications. For example, if the circuit requires 400 mili-amps, CARDONE tests up to 1000 mili-amps.

The bottom line is that CARDONE ECCs typically don't come back. This saves your time, money and reputation. So the next time you purchase ECCs (or any electronics product for the matter) consider your source. When you look through the zoom lens, CARDONE Electronics stand above the rest.

CARDONE®

ABS Modules • Air Supply Modules • Body Control Computers • Cruise Control Modules
Engine Control Computers • Electronic Struts • GM PROM Chips • Ignition Distributors
Mass Airflow Sensors • Power Supply Modules • Relay Control Modules • Suspension Control
Modules • Transmission Control Modules • Vane Airflow Meters