

# INSTALLATION INSTRUCTIONS

## 103065 Ultrachip™ Version 4 Full Custom

### READ ALL DIRECTIONS BEFORE INSTALLATION

Make a note of your radio stations, because the stations in the radio's memory will be erased once you remove battery power. Now, disconnect the battery. The ECM (computer) unit is located on the passenger-side kick panel. To access the unit, remove the plastic pop retainer that holds the assembly in place. Pull the assembly away from the side and remove the top plastic cover from it. Then, slide the ECM from its slot in the kick panel (see FIG. 1). Using a 1/4" socket wrench, remove the two screws that hold the access cover in place. Under the cover you will see the EPROM chip in its holder. Lift the chip carefully and evenly up from the circuit board. NOTE: This chip is sensitive to static electricity. Even the slightest static discharge can destroy the chip! Be absolutely sure that you are not carrying or creating a static charge when handling the ECM unit. It is always good practice to "ground" yourself out by touching the metal frame of the car, or any large metallic structure. Take the ULTRACHIP out of its static-proof box and plug it into the EPROM socket as illustrated in **Fig. 1**. You should not have to force the chip into the socket; however you must be absolutely sure that the chip is firmly and completely seated in its socket. Select a suitable location for the thumbwheel switch. It fits nicely in the space between the dash cluster and the radio cluster, just to the left of the fan switch. If you prefer, you can install it in the glove box or console so as not to make its presence obvious. Run the cable up and under the glove box. You will need to remove three screws that hold the lower insulation cover (beneath the glove box) to position the harness wire. Insert the plug from the thumbwheel cable into the ULTRACHIP connector on the chip itself. The aluminum access cover cannot be reinstalled onto the ECM unit because the new chip is slightly taller than the original factory EPROM chip and the cable must exit from the unit. To protect the ECM against dust and dirt, cover the opening with the foil tape supplied. The chip cable will exit from the end of the tape. Slide the ECM back into the kick panel. Re-install the cap on top of the kick panel, re-install the pop screw, and place the assembly back into the original location. Re-connect the battery. Place your original PROM chip in the anti-static box, and put the original cover and screws in a safe place. You are now ready to run the engine. If for some reason the "SERVICE ENGINE SOON" light does not illuminate when the ignition key is turned on, check to be sure both connectors are firmly seated on top of the ECM unit. A bad connection or faulty chip will cause the "SERVICE ENGINE SOON" light to flicker or stay on when the car is running.

### INSTRUCTIONS FOR USE

**The thumbwheel switch increments from 0 to 7, providing a selection of EIGHT specific programs.**

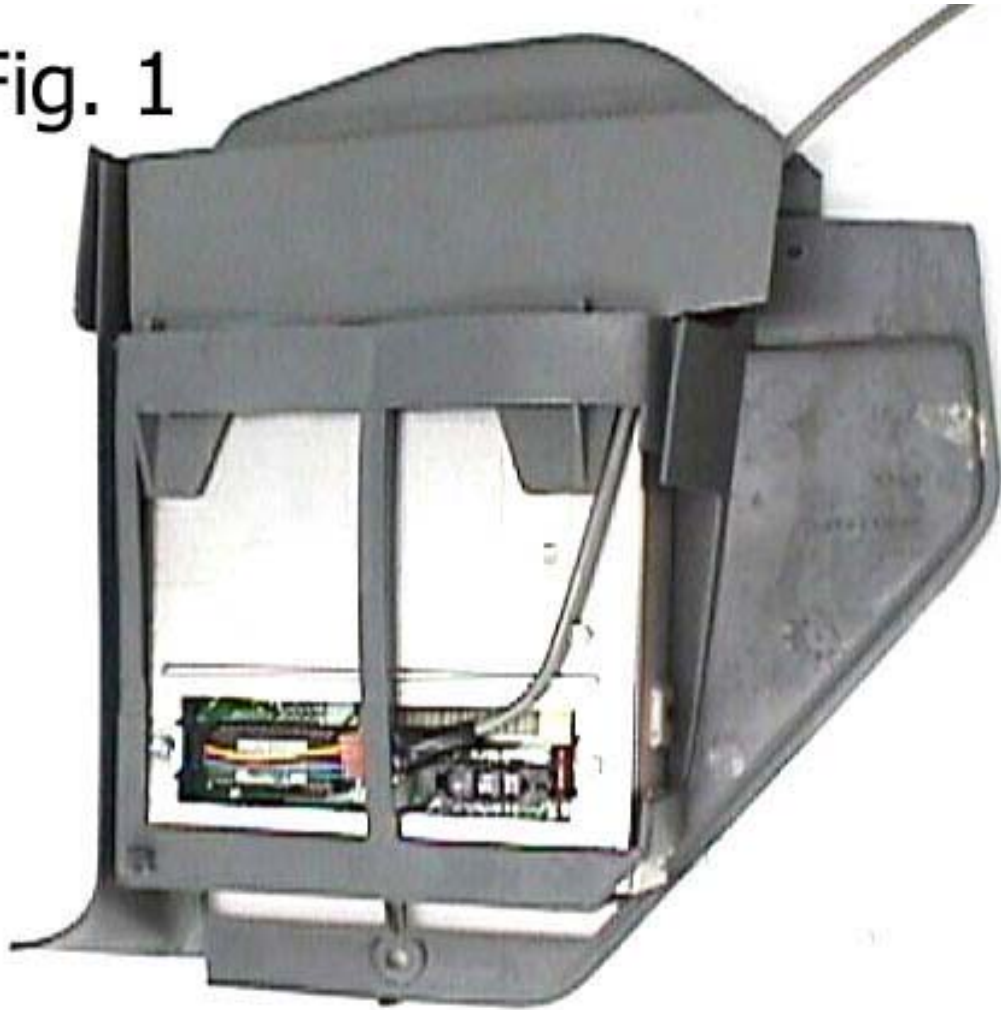
The switch can be set to any desired position between 0 and 7. Position 0 is the anti-theft setting that prevents the car from being started when selected. Positions 3 thru 7 are performance settings that are designed to progressively increase performance by increasing turbo boost, spark advance, fuel delivery, etc. Since this is a custom programmed chip, each setting is set up specifically for your combination and the upper settings require high octane race fuel only. The settings can even be selected while running the car. The settings on the chip are arranged progressively for performance of the vehicle. In other words, the higher the number on the switch, the more performance is achieved through the ECM, except setting 0 which is the anti-theft setting. Select setting 0 when leaving the vehicle; this setting shuts off fuel, rendering the car inoperative. Don't select setting 0 when driving, as it will shut the car down. It should be understood that different program selections will cause your car to perform differently under changing and varying conditions such as ambient temperature, humidity, elevation above sea level, road surface, driver reaction, etc. Ultimately, you will find a "favorite" setting to use for each specific driving need. We recommend the use of high octane fuel for all settings. The use of a 160 degree thermostat is highly recommended. NOTE: Some switch settings on the ULTRACHIP may cause your engine not to meet EPA emissions standards for use on public highways and roads, and therefore are recommended

**For off-road, non competition use only.**

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**See the next page for specifications:**

Fig. 1



<b>SWITCH SETTING</b>	<b>PROGRAM TURBO BOOST PSI</b>	<b>REV LIMIT RPM</b>	<b>SPEED LIMIT MPH</b>	<b>W.O.T. SPARK TIMING DEG.</b>	<b>FEATURES OF EACH SETTING</b>
0	N/A	0.0	0.0	N/A	NO-START
1					
2					
3					
4					
5					
6					
7					