## HOWELL ENGINE DEVELOPMENTS

## SPECIAL INSTRUCTIONS FOR MONTE CARLO/EL CAMINO TPI WIRING HARNESSES

Our Monte Carlo/El Camino wiring harnesses are designed to fit most late model GM cars already computer equipped, and plug directly into the vehicle instrument panel harness. There may be some minor vehicle differences that will cause difficulty, due to model year differences and original power plant. Some are explained below.

All MC harnesses use the late style GM Relays with weather proof sealing, Part No 14089936. Three are required.

Our harness does not replace the underhood engine wiring harness that connects to alternator, air conditioning or dashboard lights, gauges, and basic ignition wire to distributor. Computer harness runs only the fuel injection and ignition, plus transmission connectors.

All carbureted computer controlled cars use a Lamp Driver module between the computer and the "service engine soon" or "Check Engine" light. TBI or TPI computer vehicles do not use a lamp driver, instead, are wired directly from computer to SES light. (through the IP harness connector). It will be necessary for you to wire around this lamp driver to make your SES light work correctly with TPI.

The Lamp Driver module is taped to the IP harness near the computer harness connector (white plastic 15 pin on my harness) It has four wires going to it. Clip the yellow one, and the white with green stripe wires and join them together. Solder and tape this splice. Now your SES engine light should work correctly with TPI.

You may also want to add a "serial data link" wire from our IP harness connector to your ALDL terminal under the dashboard. Carbureted cars did not have this wire so both your IP connector and ALDL Terminal have a blank slot for it. Using the metal terminals we supplied with your harness, you can run an 18 gauge wire from position "J" on the IP connector to position "E" in the ALDL terminal. This is an orange wire in our white plastic IP connector. The serial data link allows a tune-up mechanic with a scanner to trouble-shoot the system with his scope.

Please contact us if you have any other troubles.

B.H. Howell 5/31/89