

Commander 950 Auxiliary Injector Driver Module P/N 534-195



Installation Instructions & Troubleshooting Manual P/N 199R10387

One or more of the following items may be required to complete the installation of this kit.

Parts:

Twin TBI Adapter Harness PN 534-196 (Required if using (2) 4 bbl TBI throttle bodies) Appropriate Terminal Ends Fasteners to Mount Box

Tools:

Screwdriver Drill and Bits Wire Cutters Wire Strippers/Crimpers

<u>NOTE:</u> These instructions must be read and fully understood before beginning installation. If this manual is not fully understood, installation should not be attempted.

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INTRODUCTION:

Holley Performance Products has written this manual for the installation of the **Commander 950 Auxiliary Injector Driver Module**. This manual contains all the information needed to install this system. Please read all the **WARNINGS, NOTICES, NOTES,** and **TIPS**, as they contain valuable information that can save you time and money. It is our intent to provide the best possible products for our customer; products that perform properly and satisfy your expectations. Should you need information or parts assistance, please do not return the unit to the store without first contacting technical service at 1-270-781-9741, Monday through Friday, 7 a.m. to 5 p.m. Central Time. By using this number, you may obtain any information and/or parts assistance that you may require. Please have the part number of the product you purchased when you call.

Warnings, Notes, & Notices:

WARNING!

As with all electronic devices, when welding on the vehicle, always remove both the positive and negative leads of the *Commander 950* system from the battery, and remove the Module from the vehicle. This will help prevent damage to the system's electronic control units.

WARNING!

Always turn the ignition switch "off" before connecting or disconnecting any wiring of the Commander 950 system. Failure to turn the switched power "off" may result in damage to the Commander 950 system.

WARNING!

The Commander 950 system is not waterproof. Do not submerge, splash, or otherwise have the unit come in contact with water, or damage to the Commander 950 ECU or vehicle may result.

WARNING!

Do not use any non-Holley devices that alter the pickup signal to the *Commander 950 Fuel Injection ECU*, (i.e. timing retard modules, external over-rev modules, etc.). Use of any non-Holley device with the Commander 950 system may result in damage to the system.

OVERVIEW:

The **Commander 950 Auxiliary Injector Driver** provides the additional drive capabilities needed when running 8 lowimpedance injectors. The Commander 950 has four 4:1 peak-and-hold injector drivers. This type of driver is required to operate low-impedance injectors and one driver is required for each injector, however, this same type of driver can drive two highimpedance injectors that are connected in parallel.

Below are steps to follow to get you started in the right direction and to help you understand this manual.

Before installing the system you must get to know the system by reading the manual and determine if any optional parts are needed.

What this kit is designed for:

This unit is designed for systems using 8 low-impedance port fuel injectors or two 4 barrel Throttle Body Injection (TBI) systems.

AUXILIARY INJECTOR DRIVER MODULE INSTALLATION:

Module Installation:

- 1. Disconnect both the negative (-) and positive (+) battery cables at this time. If you disconnect any other wiring, label it. This includes all accessories!
- 2. Disconnect the five-wire injector connector from either the throttle body or the port injector adapter harness.
- 3. Determine the mounting position of the Auxiliary Injector Module.
- 4. The module can be mounted on the firewall in the engine compartment, provided that it is away from the direct heat from the headers.
- 5. Using the Auxiliary Injector Module as a template, mark and drill 4 holes at the mounting location.

WARNING!

Before drilling or punching a hole in the firewall, know what is on the other side. Avoid puncturing equipment, such as heater cores, air-conditioning system equipment, hoses, or wiring.

- 6. Using four bolts (not supplied), mount the Digital Control Module through the holes in the base plate.
- 7. Route and connect the single five-wire female injector connector from the Commander 950 ECU harness to the single fivewire male connector on the Auxiliary Injector Driver Module wiring harness.
- 8. Route the 12 gauge black wires to a good ground (preferably the battery).
- 9. Route the 12 gauge red wire (with fuse holder) to the battery. Connect to the positive (+) terminal.

Dual Throttle Body Installation:

NOTE:

When running dual 4 bbl style throttle bodies, harness P/N 534-196 must be used.

- 1. Connect the male end of the TBI adapter harness to the female end of the injector driver box. Connect the two female ends of the TBI adapter harness to both of the TBI unit.
- 2. Make sure that the TPS, MAT, and the IAC harness leads for the Commander 950 ECU are connected to one of the throttle bodies.
- 3. Secure the five-wire harness leads with tie-wraps to minimize movement and the possibility of interference with throttle linkage movement.

Top-Fed Port Injectors:

The unit will plug directly into the existing Commander 950 port injector harness.

WARNING!

This unit is designed to control an even number of injectors. Each driver wire must supply two injectors. Running a single injector off of one driver wire can damage the unit and the injector.

BATTERY CONNECTIONS:



- 1. Reconnect both the negative (-) and positive (+) battery cables.
- 2. The unit comes with a 35 amp fuse already installed.
- 3. Check and make sure all connections for the fuel injection system have been completed. This includes, but is not limited to; Throttle Position Sensor, Manifold Air Temp, Engine Coolant Temp, oxygen sensor, ignition, injectors, and switched power.
- 4. You are now ready to start the mapping process. Refer to the Commander 950 manuals for more information.

SPECIFICATIONS:

Input Voltage: 10 - 16 volts DC (negative chassis)

Holley Performance Products Inc.

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