

# 80 mm THROTTLE BODY for 1986-93 FORD 5.0L MUSTANG P/N 112-510 95 mm THROTTLE BODY for 1986-93 FORD 5.0L MUSTANG P/N 112-513 RACE FORD EFI THROTTLE BODY IAC BLOCK OFF PLATE P/N 112-560 RACE

## **Installation and Adjustment Instructions**

#### INTRODUCTION:

Congratulations on your purchase of a Holley Throttle Body Kit! Holley Performance Products cannot and will not be responsible for any alleged or actual engine or other damage, or other conditions resulting from misapplication of the products described herein. However, it is our intent to provide the best possible products for our customer; products that perform properly and satisfy your expectations. Central Time; please have the part number of the product you purchased when you call.

WARNING! These instructions must be read and fully understood before beginning installation. Failure to follow these instructions may result in poor performance, vehicle damage, personal injury, or death. If these instructions are not fully understood, installation should not be attempted.

#### **APPLICATIONS:**

The products contained in this kit are designed to be a high performance replacement for 1986 - 1993 5.0L Mustangs. The large bore throttle body **MUST** be used with a large bore EGR spacer. If the O.E. EGR spacer is used, a qualified machine shop must bore the EGR spacer to the same diameter as the throttle body AND a new gasket must be fabricated to keep coolant from leaking into the engine.

### THROTTLE BODY KIT CONTENTS:

- Throttle Body Assembly
- Throttle Body/EGR Spacer Gasket
- Idle Solenoid to Throttle Body Gasket

# **INSTALLATION:**

- 1. Disconnect the negative battery terminal.
- 2. Loosen the air inlet tube clamp and the air cleaner clamp located on the throttle body. Carefully remove the air inlet tube from the vehicle.
- 3. Disconnect the throttle position sensor and idle speed control solenoid connectors from the throttle body and disconnect the EGR position sensor connector from the EGR valve.
- 4. Disconnect the EGR vacuum line from the EGR valve. Loosen the two hose clamps on the EGR spacer that hold the throttle body coolant hoses. Remove the throttle body coolant hoses.

WARNING! SOME COOLANT MAY DISCHARGE FROM THE THROTTLE BODY COOLANT HOSES. HOT COOLANT MAY CAUSE BURNS OR OTHER INJURIES. LET ENGINE COOL BEFORE REMOVING THROTTLE BODY COOLANT HOSES.

- 5. Disconnect the throttle linkage.
- Remove the four (4) throttle body attaching nuts. Remove the throttle body and EGR spacer from the upper intake manifold.

NOTE: To achieve maximum performance with the Holley large bore throttle body use the matching diameter EGR spacer. Holley recommends the upper manifold be bored out to match the exact millimeter bore of the throttle body. Also Holley recommends our upper and lower intake manifold kit P/N 300-72S.

7. Remove the idle speed solenoid from the old throttle body and install on the new throttle body using the gasket provided.

Install the new EGR valve onto the EGR spacer using the gasket provided.

- 8. Install the following onto the intake manifold studs in order of listing.
  - A. EGR spacer gasket
  - B. EGR spacer
  - C. Throttle Body Gasket (see drawing for gasket positioning)
  - D. Throttle Body
- 9. Torque the throttle body attaching nuts to 12-18 ft./lbs.
- Reconnect the throttle position sensor, EGR sensor, and the Idle Speed Control solenoid.
- 11. Connect the throttle body coolant hoses and tighten securely.
- 12. Connect the throttle linkage.
- 13. Re-Install the air inlet tube onto the throttle body and air cleaner. Tighten clamps securely.
- 14. Reconnect the negative terminal of battery.

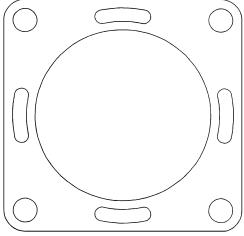


Set the idle speed by using the following sequence:

- 1. Turn the ignition switch to the off position.
- 2. Turn the throttle plate hard stop screw 5 turns clockwise from the fully closed position.
- 3. Disconnect the idle speed control solenoid.
- 4. Run the engine until it is at operating temperature.
- 5. Turn the throttle plate hard stop screw counter-clockwise until the lowest factory idle speed setting of 625 rpm is obtained. It may be necessary to increase the idle speed if the engine has been modified.
- 6. Turn the engine off and reconnect the idle speed control solenoid.

## **CHECKING THE TPS VOLTAGE:**

- 1. Turn the ignition switch to the on position, but do not start the engine.
- 2. Using a digital volt/ohm meter, measure the voltage between the Dark Green/Light Green wire and the Black wire. The voltage should read between 0.8 and 1.0 volts.
- 3. The TPS voltage can be adjusted by loosening the two screws and slightly rotating the throttle position sensor. If necessary, elongate the mounting holes on the TPS to obtain this reading.



Throttle Body/EGR Spacer Gasket