Installation Instructions for Mass Air Wiring Harness

The replacement computer numbers are:
Automatic: E9ZZ 12A650 CA
Manual (convertible): E9ZZ 12A650 BA
Manual (hard top): E9ZZ 12A650 AA
For later model computers the numbers are as follows:
Automatic: F3ZF 12A650 BA
Manual: F3Z 12A650 AA
Universal rebuild EEC- certified replacement: F3ZF 12A650 DA
This Kit may also be used with other applications, some of which are:

1993 Cobra computer: F3ZF 12A650 CA
This computer takes a special calibration and 24# injectors.
1986 to 1991 2.3 L Mustang and other vehicles: F12F 12A650 AB
This requires a different pin placement in the computer wiring connector.

The conversion from Speed Density to Mass Air is easily done in about two hours. It involves changing the computer and adding an electrical harness to the existing EEC Connector.

Tools Required

- 10 mm socket
- 8 mm socket
- Needle nose pliers
- Side cutters
- Wire strippers
- Crimper (Waldon W-HT-19190)

Note: Disconnect Battery Before Beginning Conversion Step
Note: In 1986-87(EFI) vehicles with thermactor pump and plumbing still attached, the movement of the two pins on the EEC IV connector is required:

Pin 51 must be moved to Pin 38 in EEC IV connector.
Pin 11 must be moved to pin 32 in EEC IV connector.

In 1986-87 vehicles, you may need to connect other wires to avoid EEC error codes. These are:

1. Pin 19 is the fuel pump monitor. A wire with a pin is provided to put in pin 19, and it must run to the hot wire on the fuel pump (Pink wire with Black tracer under driver seat). This wire is only necessary if you do not want a diagnostic code. Omitting this wire will not help performance.

2. Pins 3 and 6 are vehicle speed sensor lines, and will affect some closed throttle operation of your car.
   A. Pin 6 is the Orange ground wire and should be spliced/soldered to the Orange with Yellow tracer ground side of the speed sensor. The sensor is found at the end of the speedometer cable, near tail of transmission.
   B. Pin 3 is the Green + wire and should be spliced/soldered to the second wire, Dark Green with White tracer.

Conversion steps:

1. Remove Speed Density EEC by:
   A. Removing kick panel on right side in front of passenger door.
   B. Remove white plastic retainer that holds the EEC to the wall.
   C. Pull EEC down from inside the wall.
   D. Remove the connector from the EEC using the 10 mm socket; back out screw in the center of the connector.
2. Install mass air meter as per instruction provided with the unit.
3. Plug in connector on conversion harness to the electric unit on mass air meter.
4. Route conversion harness to the firewall (passenger side) following existing wires or hoses; use the wraps provided to secure harness.
5. Put conversion harness through the firewall close to the EEC computer. This may require a new hole. We suggest that you locate the large grommet that the EEC IV harness is running through. Force a hole in the thin section adjacent to the wire bundle and, using the front of a click-type ballpoint pen to protect the EEC IV from damage, push the wire through the fire-wall and fish the wore out from behind the heater.
6. Remove the red "H" shaped plastic pin lock by pulling on lock with needle-nosed pliers. The plastic lock should be removed with ease by working gently on all portions of the lock piece. You will not be able to push the pins into the connector without pulling this piece out. Attach the four wires to computer using the following pin information: See Figure 1 and Figure 2.

   A. Green Wire (pre –crimped, with connector pin):
      Connect to pin #9 (2.3 L pin #15) on EEC IV connector (air meter pin C).
   B. White connector (pre-crimped, with connector pin):
      Connect to pin #50 (2.3 L pin #14) on EEC IV connector (air meter pin D).
   C. Red Wire:
      Use scotchlock 560B connectors, which are blue plastic, to the existing red wire on pin #37 of EEC IV connector (air meter pin A).
      See instruction sheet for use of splice connector
   D. Splice to the black wire on either pin # 40 or # 60 on the EEC IV connector, using the same procedure as for the red wire.

Figure 1:

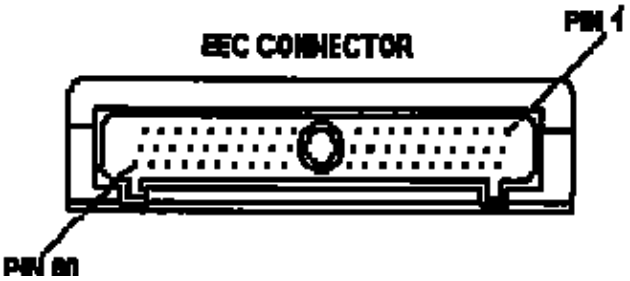

Figure 2: Mass Air Wiring Harness

(A): Red (Pin #37) B+ 12V

(B): Black (Pin #40) Ground

(C): Green (Pin#9) Signal Return

(D): White (Pin#50)
Signal Out (MAF) 0-5V

7. Re-install the MAF computer.
8. Disconnect the hose from the manifold absolute pressure sensor that is located on the center of the firewall. Plug the hose and leave the sensor connection open. Leave the 3 wire electrical connector plugged in.