

# Twisted Smog Diagnostic Isolator

## Instruction

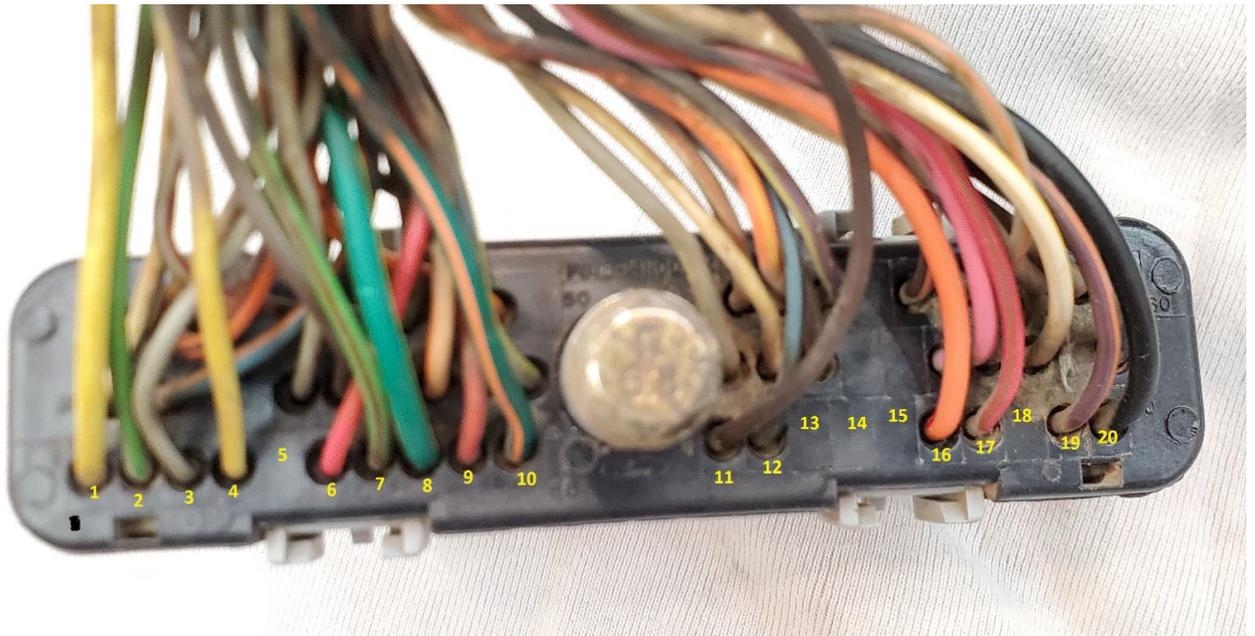
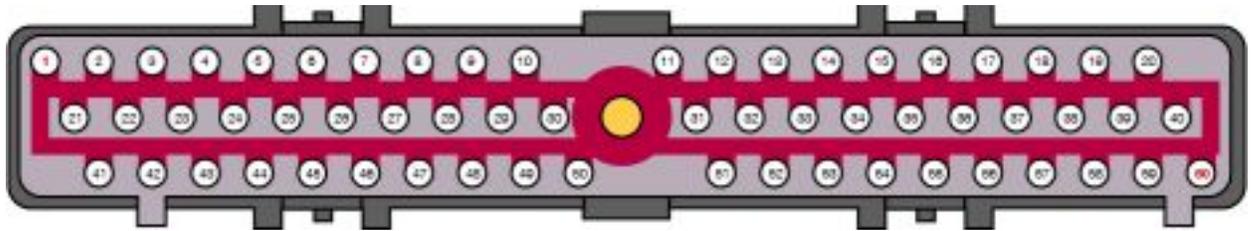
**DOES NOT WORK WITH MASS AIR FLOW (MAF), FOR EEC-IV ECUs ONLY!**

**You will need wire strippers / crimpers. Crimpers must have staking crimp (prong style), not the squash it down style crimper.**

1. Disconnect Battery
2. Unbolt cruise control unit on driver side fender
  - a. Disconnect pigtail
  - b. Leave cable connected and lay the unit out of the way.
3. On 1993-1997 Fords Unplug the pigtail from the ignition module. This is located under the cruise control assembly. If your Ignition module is located on the distributor, skip this step.
4. Disconnect the 60-pin connector from the ECU (via the 10mm bolt). As you unscrew this bolt, it stays attached

and will back-out the connector body out (pictured below).

5. Strip tape and looming back from the 60-pin connector roughly 6" (giving you access to the wires).



6. Take note that on the side of the Twisted Smog Diagnostic Isolator there is a label indicating which wire hooks up to the ECU and which wire hooks up to the Harness side of each cut you will make. Each wire from the Twisted Smog Diagnostic Isolator comes with a shielded connector

already attached (you will crimp these onto you're wires). When you have completed diagnostics, you will use these to reconnect all your wires to their original configuration.

7. Before cutting anything, locate the proper wires using diagram above (this view is plug side not the wire side). The second picture (wire side of the plug) demonstrates that there are wires missing and these spaces will be counted also. The wire side is labelled but to help as a reference #1 will always be a yellow wire, and #20, #40, & #60 will always be black.
8. You must complete all the steps on one wire before you cut the second wire. Each will be cut about 3" from the large connector. Strip back  $\frac{1}{4}$ " of the wire shield from the side of the wire heading towards the ECU. Then twist the strands. Crimp this onto the correct numbered wire labeled on the ECU side of the Twisted Smog Diagnostic Isolator. Next do the Harness side of the wire. Strip, crimp, and connect.
9. Locating the first wire to cut coming from pin #17. Only cut this wire for now, crimp the corresponding ECU then Harness wire from the Twisted Smog Diagnostic isolator to their corresponding two sides, then move onto the next.

10. The second wire will be the wire from Pin #11 (your harness may not have a #11 that is OK skip this slot). Carry onto #'s 27,31,33,51.
11. There is a switch located on top of the Twisted Smog box. It must be connected via the switch. If using a scan tool at the "EEC-IV Test Port" you will need to flip the little switch to the on position " I ", the " 0 " is off. This reconnects the check engine light and is needed for the diagnostic port.
12. You can now temporarily mount the Twisted Smog Diagnostic isolator in a convenient location (We have found underneath the hood mount on driver is a great location to keep everything).



13. Reconnect ECU

14. Reconnect Ignition control module

15. Re install cruise control module

16. This completes the wiring side of the install

17. Now it's time to install the EGR block off plate. Also install the plug in the smog pump hose at the Catalytic convertor.

18. Next simply remove the smog pump belt, remove the three 10mm bolts that hold the smog pump pulley, and remove the pulley.
  
19. Install the shorter serpentine belt.
  
20. At this point you can hook up the battery and you are good to start the diagnostic process. It can take anywhere from 1/2hr to 5 hrs of drivetime for your ecu to learn your vehicle. Give it time to learn. "DO NOT GO RACING UP A MOUNTAIN FOR THE FIRST DRIVE" The last thing you want is to experience a lean condition at loaded throttle for a length of time.