Modifry Products

ECT-2 Module for S2000

Installation

- 1. Remove the driver's side doorsill trim and the driver's foot well side panel (held on with snap-clips) to gain access to the S2000 ECM (Engine Control Module).
- 2. Locate the connectors and wires you will be using from the below photo of the ECM. The connector diagrams show the wires you need with yellow highlights, oriented as if you are viewing the connector from the "wire side".
- 3. Run connecting wires from the ECT-2 module terminals and T-tap them to the ECM wires as noted below, referring to the wiring diagram below. It may be easier to unplug the ECM connectors to make these splices.
 - a. +12v power connects to the Yellow/Black (wire #1) at the top left of connector B.
 - b. Ground connects to the Green/Yellow (wire #18) in the middle row of connector C.
 - c. **Sensor** connects to the **Red/White** (wire #26) in the rear-most row of connector C.



4. The **Yellow/Green** wire (#1) from ECM connector A controls the temperature gauge and must be cut to disconnect the ECM from the gauge. Insulate the end of the wire connected to the ECM and connect a wire from the ECT module **Gauge** terminal to the other end of the **Yellow/Green** wire.

Note - the "Jumper" terminal on the ECT-2 module is not used in this installation.

Testing procedure - Turn the ignition to ON and observe the blinking LED on the module. Blink rates will vary from once every 2 seconds (engine cold) to about 5 blinks a second (engine overheated), with normal coolant temperatures causing about 1 to 1.5 blinks per second. If the LED does not blink then the module is not receiving power, so check the +12v and ground connections. Bad ECT modules are rare as each one is tested on an S2000 cluster before shipping.

Cluster Test Mode - With power off, connect a jumper wire from the ECT module Program terminal to the +12v terminal. Apply power and the LED will turn on and stay on, indicating it is in test mode. The module will send a signal to the S2000 cluster to light the 3rd bar (AP1) or the 10th bar (AP2) on the temperature gauge. The gauge responds slowly so it may take up to a minute for the correct reading. This test verifies the ECT module is working, that it is connected



to the correct terminal on the cluster, and the cluster is operating correctly. If the cluster gauge does not display the proper reading, verify the wiring from the ECT module **Gauge** terminal to the ECM **Yellow/Green** wire. To exit the test mode, power down the ECT module and remove the temporary jumper wire.

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Additional Notes

Notes for AP1 cars - The stock temperature gauge uses the temperature settings shown on the left and the default programming of the ECT module will re-calibrate the gauge as shown on the right.







Modifry Display

Most owners are used to seeing 3 segments all the time, which is not surprising once you know that the 3rd segment covers an absurd temperature range of 70°, from 160° to 230°F. The ECT Module changes the display so that it is more informative and as a result it will be more "active" than the stock gauge.

As you can see, the Modifry display lights the *second* segment at 160°, the traditional "OK to VTEC" temperature that lights the third segment on a stock car. Each successive segment indicates an additional 15° temperature rise, which makes it easy to know the actual temperature. With the standard programming in the ECT module, normal engine temperatures will be displayed as 3 bars most of the time with an occasional 4th bar showing in hot weather or stop-n-go driving.

Notes for AP2 cars - The stock temperature gauge uses the temperature settings shown on the left and the default programming of the ECT module will re-calibrate the gauge as shown on the right.



Note that with the stock gauge, a change of 1 segment could indicate as little as 5 degrees or as much as 47 degrees temperature change. Also, there are times when more than one segment will light up at once, and this behavior makes it difficult to know exactly what is going on.

The new calibration lights 1/4 of the gauge at the "OK to VTEC" temperature and the "fully warmed up" temperature range is indicated when exactly 1/2 of the gauge is illuminated. Beyond the half-way mark, each segment represents a 5° temperature increase so it's always easy to know exactly what the coolant temperature is.

Most owners are used to seeing 8 segments all the time, which is not surprising once you know that the 8th segment covers a temperature range of 47°, from 178° to 225°F. The ECT Module changes the display so that it is more informative and as a result it will be more "active" than the stock gauge.