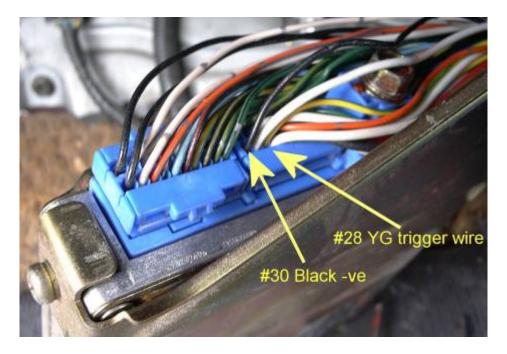
TWD installation procedure

- 1. Read about TWD <u>here</u> to get a thorough understanding of operation & installation.
- 2. Remove centre stereo-aircon vent panel & stereo/cradle to expose accessory wiring locate the 12v +ve supply from <u>IGNITION ACCESSORY key position</u> using test light or multimeter. Usually a BLUE wire. Do NOT use an always 'live' feed such as the clock or stereo memory supply.

TIP: Ensure you <u>have</u> located the ACCESSORY 12v feed which is ON, or 'live' ONLY at key ACCESSORY position and when engine is running otherwise TWD will be actively flashing ALL the time.

3. Behind passenger footwell - locate & remove ECU retaining screws; remove cradle and expose the wiring loom. Connect TWD>ECU wires as per wiring code supplied with TWD. Picture below may assist locating ECU wires.



4. Installing the LED. You have 2 choices:

OPTION 1 [simple]

Mount LED in the lower warning light panel for maximum visibility. This location is good as it's in line-of-sight & LED's are most visible head-on.



Instructions:- See also HERE

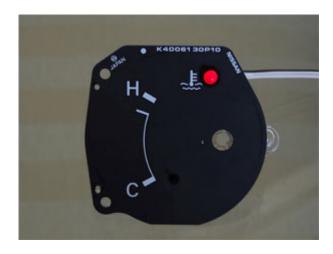
- 4.1 Undo the five screws securing the trim covered lower dash panel above pedals (fifth screw is behind the end panel surrounding the side air vent- lever this panel off by carefully inserting a blunt object in toward the front and lever out)
- 4.2 Undo the two control binnacles (housing A/C and wiper controls on left and headlight /rear defroster switches on right) either side of the instrument panel. These are secured by two screws under each binnacle. Once the screws are out, lever the binnacle fascias out from the bottom and unhook from top locator inside binnacle. (It is easy to unplug the switch assemblies)
- 4.3 Unscrew the four locating screws found at the rear and inside each binnacle housing 4.4 Undo the instrument panel top cover by removing two locating screws (above instruments). Carefully lift toward you and upward to remove cover. Unscrew the two

(closest to you) locating screws holding the instrument assembly

- 4.5 Grasp the black instrument panel lower plastic fascia firmly but carefully and lift upward and toward you. (There are two locating clips either side of the steering column which need to disengage).
- 4.6 Carefully lift the instrument panel lower fascia as far up as possible without breaking any wiring or the fascia itself
- 4.7 Mounting tip: Do a $\underline{\text{trial fit}}$ using an old piece of plastic (ice-cream container) or similar. Procedure: Mark position & drill a 6mm (1/4") hole. Insert LED, from behind, fully thru hole insert bezel, from front, over LED, halfway. Now push LED & bezel back into hole until bezel clips over back of LED to hold it into place. If it won't go easily, open out hole slightly ... 1/4" drill works fine but = 6.35mm!

OPTION 2 [best]

Mount LED in the OEM water temp gauge fascia.

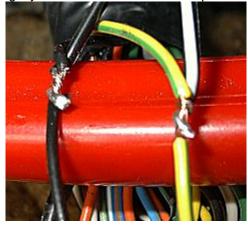


This requires a little more work, disassembling the cluster, extreme care drilling holes etc. but looks OEM when finished. IMPORTANT note: paint or cover back of LED (with blutack) to prevent backlighting from instrument lights.

Instructions for cluster disassembly **HERE**

5. Connect wiring as per colour coding supplied with TWD. Connecting to ECU wiring is BEST done via the 'military splice' method which does not require severing of the wires or soldering [although you may solder the joint if desired].

To splice: having located the appropriate ECU wire, and starting back from ECU plug about 150mm – cut the insulation ONLY. Gently push the insulation back approx 20mm to expose the wire strands. Insert a sharp probe between the strands and open them up so the TWD's wire may be inserted into the 'hole'. Twist TWD wire around the ECU wire tightly and cover with insulation tape. Finished [soldered joint] looks like this:



NOTE: Once all wiring is connected and before reassembly or your car's interior, test the TWD by turning ignition key to either ACC or IGN position, LED should flash. Start engine and LED should NOT be flashing - if it is, you have the wiring wrong - check all steps above.

6. The TWD module is best located below main a/c vent - above stereo using double-sided tape or cable ties. LED is supplied ready connected & may be fed thru to mounting location without disconnecting. NB: TWD has been pre-tested and calibrated for 95C degrees ON.

WARNING: Nothing substitutes for a properly maintained cooling system. Your TWD is a high TEMPERATURE WARNING DEVICE only. 95 degrees will NOT be detrimental to your engine – OEM gauge at maximum [105 – 120 degrees] may be!

Expect to see it FLASH *in high ambient temps with a/c on and/or during 'spirited' driving....* if you know all is well with your cooling system the TWD will turn OFF within approx 5 seconds of reducing engine load by turning a/c OFF. [This is a good quick test that I've become accustomed to].

NOTE: If TWD comes ON during *normal driving* conditions, alerting you to a potential cooling system fault [ie coolant loss], pull over and:

- a. Leave engine idling for a while but turn headlights and a/c OFF
- b. Turn heater on FULL blast
- c. Pop the bonnet and investigate. [Do NOT remove radiator cap].
- d. Pulling CTS connector OFF will engage thermo-fan and/or trickle some water over the top of the radiator to bring temps down.