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TAU2-A

Modelo:

0811.03

Rev doc: 00

Over temperature protector for cars

Users Manual

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Warnings

The device need 12Vdc to work.



Install the device and wiring as far as possible of spark, coils, and all high voltage and noise source.



Do not wet the device, and do not use chemicals for cleaning, just a damp cloth.



Place the device and wires as far as possible of heat sources like manifold, exhaust etc.



The temperature probe have crystals, the excessive pressure or the hard work can break and avoid the warranty.



The electrical connections must be correctly isolated and soldered.



The car electrical installation must be the original, without modifications in ignition system, tuning etc.



The engine shut down require external relay.

Do not puncture, open or break, any pipe or other engine part.



Do not forget add one fuse of 1A

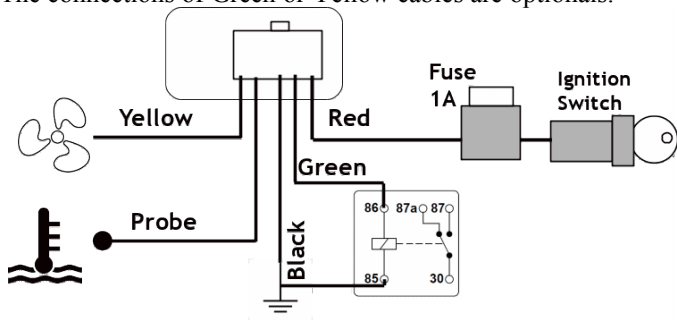
NOTE 1: The normal operation depend of follow all observations in the present manual.

NOTE 2: SCHlabs decline all responsibility for any damage to people or things due handling of devices or wires.

Electrical Installation

The electrical wiring must be done as described on the following diagram.

The connections of Green or Yellow cables are optional.



Connecting radiator Fan

Measure the voltage in the fan terminals and write it in a paper while the fan is off. And repeat the measures when the fan is on. Check with the following table and connect the yellow to the box marked on bold letter.

Example 1:

	Fan OFF	Fan ON
Cable1	12v	12v
Cable2	12v	<6V

Example 2:

	Fan OFF	Fan ON
Cable1	0v	0V
Cable2	0v	>6V

Must connect to the shadowed cable.

Shutdown Relay Connection

The shutdown connection is optional. If you want do there are many ways to stop an engine. But the installer must be careful with:

- The driver don't loose the breaks
- The driver don't loose steering.
- The driver don't loose the vehicle control.

One good choice is cut the fuel flow.

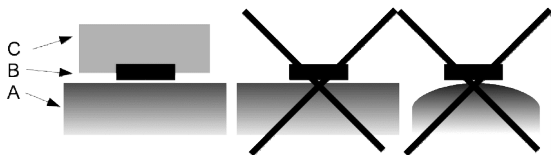
Probe Placement

There are 2 ways to use the temperature probe:

- 1)Reading the water
- 2)Reading the cylinder head.

In both cases is recommended take car that the probe act by external contact. This mean that if the probe is placed bad will not offer any protection.

- The probe must have the maximum surface with the hot area.
- The probe need thermal isolation with external temperature.
- Avoid that the probe will be cooled by wind
- The probe is of crystal, don't do excessive pressure, don't hit, or twist.
- DON'T remove any original sensor of car



C=Thermal isolator (Rubber, Eva Ruber, expanded polystyrene)

B=Probe

A=cylinder block, Head Cup or water pipe.

Reading the water

Measuring water is the way chosen by manufacturers to read the temperature of an engine. However when there is a break in a hose or radiator, it can not always be seen before great damage.

If you choose this way follow the next cautions:

- DO NOT OPEN THE COOLANT CIRCUIT (this will break the pressurization)

- Ensure that the probe touch a place with high coolant flow.

One way to do that is touch a pipe and put a piece of old gum chamber and fix it with 2 nylon strips. or 5 or 6 laps of cloth insulation tape. The gum will prevent that the air cool the probe.

Reading on cylinder head

If it is well measured it is the ideal way to save the engine. However, it depends a lot on the location of the probe, since it can be affected by the heat of the exhaust pipe, by the frontal winds and other circumstances, that's why it is only recommended to be installed by experts. In addition to having different variations to which one is accustomed to see.

If you choose this way follow the next cautions:

- Touch with the probe any place against any place where the temperature of cover reach the probe.

- Some peoples do a hole in the cover, this only can do people that know the cylinder head in both sides to ensure no trespassing. (really expert)

- Avoid that the probe be cooled by the wind.

- Do not remove covers, gaskets or the cover screws.

- The most heat place is close to the junction of cylinder block and head cup.

Working

The TAU2 read the temperature of engine in a range of 0~123°C or 30~255°F.

When the temperature exceed the critical setting start the screen blinking, and a warning sound (One beep for each degree in excess). In this way the noise will be more annoying with more temperature excess.

If you press the middle button the sound will be muted. This will remain until temperature go down. The mute do not block the engine shutdown.

When the over temperature exceed 6 degrees, the red LED will turn on, and the shutdown signal will be send, and the sound continue in 6 beeps. If is in mute only the shutdown signal will be send.

If at start of the engine the temperature is high, the system do not do any sound or shutdown until temperature down. This is because is normal the temperature excess in short stops, and the temperature go down when the engine start and the cooling system works again

When the radiator fan is on, one led blue will be turned on.

Setting up

Press the middle button by 3 seconds to enter into setup menu:

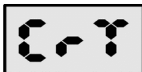


Set = Entering in setup
-03 = Version product



Use the upper and lower switch's to choose what parameter you want change and press the middle to edit the value.

Change the value with upper and lower key and when finish press the middle button.



Critical Temp: Select the temp taking care that the warning start one degree more than critical, and the shutdown is 6 more than critical.



Fan:

0=If with fan off there are 12v in the cable

1=If with fan off there are 0V in the cable



Degree scale:

0=Show in centigrade

1=Show in fahrenheit

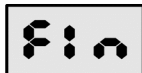


DO NOT TOUCH CAL or GAN !! Change this value alter the measurement.

To calibrate you should boil water and make sure that you mark 100c(212f) while the water is boiling. The ambient temperature is not so important.



Brillo: Change the display bright



FIN: Save the new values and return to normal operation when press the middle button.

Warranty Certificate

- General rules of the guarantee

SCHlabs, guarantees the good and correct functioning of this product.

The guarantee will be recognized for a period of 3 (three) months from the purchase, the defects of construction and materials being covered.

If, during the guarantee period, the product is defective, SCHlabs will take charge of the repairs or substitutions required by the product. They will be made at the SCHlabs facilities and the shipping costs will be borne by the customer.

For accessories or components that have not been manufactured by SCHlabs, only the guarantees of the respective producers are valid.

This guarantee is the only one given by SCHlabs, so any other is excluded.

- Terms

The guarantee will only be recognized with the presentation of this certificate with date and stamp of the reseller, or in its absence with the purchase invoice. This guarantee will be valid only for those who are in good standing with the payments.

- Warranty exclusions

- 1.- Periodic checks, maintenance, repairs or replacement of parts due to normal deterioration.
- 2.- Malfunction due to negligence, improper use or improper installation not in accordance with the given technical instructions and any defect that was not produced due to construction defects.
- 3.- Products installed, modified, repaired, replaced, assembled or maneuvered by people who do not have written authorization from SCHlabs
- 4.- Accidents due to force majeure or other causes (water, fire, lightning, electromagnetic fields, etc.) that do not depend on SCHlabs.

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HMP1: Throttle and sensors tester

LPA4: Automatic car light controller

GNC2: CNG digital switch



SCHlabs

<http://www.schlabs.com.ar>

Tel: 54 11 4639-5945

El araucano 1389 Cap Fed - Argentina.

Whatsapp: 54 9 11 5616-3749