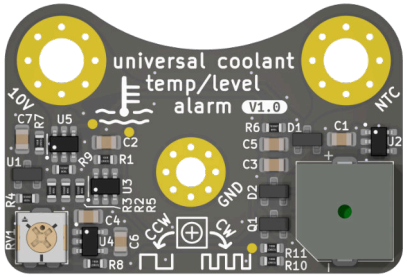
# universal coolant temp/level alarm V1.0




github
UCTLA

## Assembly instructions

This board is screwed onto the existing cooling temperature gauge on the instrument cluster and beeps as soon as the **temperature** is **too high** or the **coolant level sensor** detects **too little water**.

With "ignition on" the red LED flashes as usual, but no annoying buzzer sounds.

### Compatibility

All vehicles with a **triple-screwed temperature gauge** can be equipped with this board.

191 919 511 A ✓
251 919 511 A ✓
321 919 511 K ✓

| | | | |
|---|---|---|---|
| T3/vanagon | 1979 - 1992 | Jetta 2 syncro | 1986 - 1991 |
| Caddy 1 | 1983 - 1992 | Passat B1 | 1978 - 1980 |
| Derby 1 | 1975 - 1981 | Passat B2 | 1982 - 1988 |
| Derby 2 | 1982 - 1990 | Passat B2 syncro | 1985 - 1988 |
| Golf 1 | 1979 - 1984 | Polo 1 | 1975 - 1981 |
| Golf 1 Cabrio | 1979 - 1984 | Polo 2 | 1982 - 1990 |
| Golf 2 | 1984 - 1989 | Rallye Golf | 1986 - 1991 |
| Golf 2 syncro | 1986 - 1991 | Santana | 1982 - 1985 |
| Golf Country | 1986 - 1991 | Scirocco 1 | 1979 - 1981 |
| Jetta 1 | 1979 - 1984 | Scirocco 2 | 1981 - 1992 |
| Jetta 2 | 1984 - 1989 | | |

**Not every model year has this gauge!**



### Technical specifications

| | |
|---|---|
| supply voltage: | 10 V (LDO) |
| typ. supply current „buzzer off“: | ~1 mA |
| typ. supply current „buzzer on“: | 25 mA |
| min. buzzer-frequency: | 0,5 Hz +/-20% |
| max. buzzer-frequency: | 4,8 Hz +/-20% |
| Operating temperature: | -40°C ... 85°C |
| loudness: | >83 dBA SPL (10cm Entfernung) |

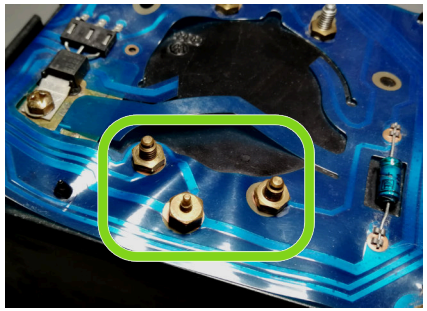
## Board mounting

tools required:

- 7mm combination wrench
- 7mm socket
- small screwdriver (- or +)

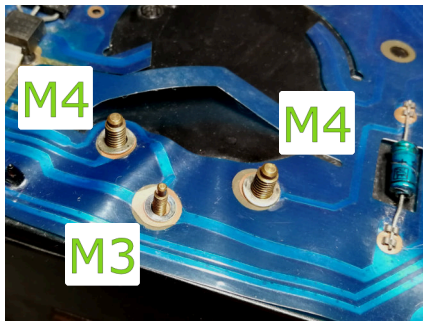
**The first step is to remove the instrument cluster !**

**1**



loosen the nuts on the rear using a 7mm wrench or 7mm socket (1x M3, 2x M4)

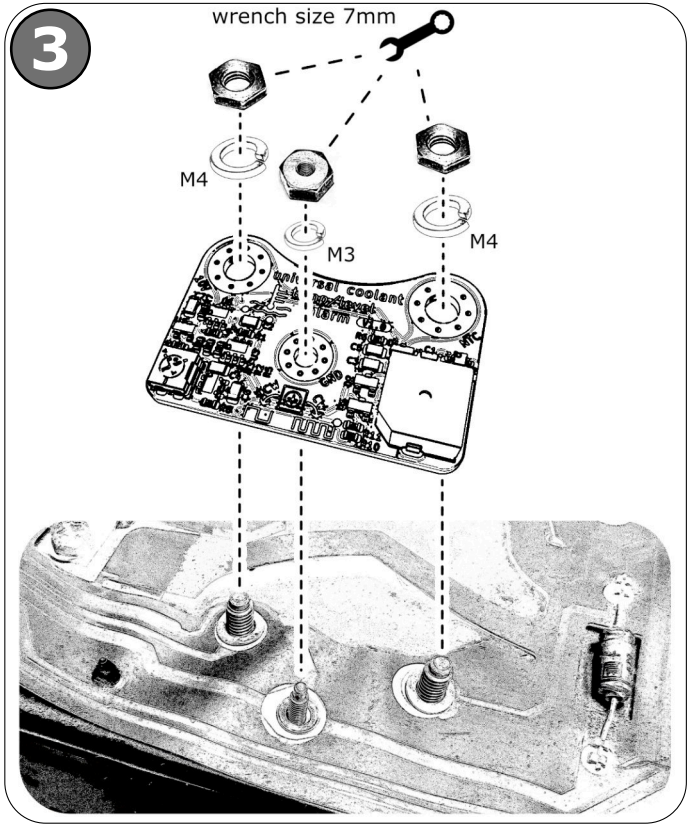
**2**




check bent washers for presence



**3**




**4**


The buzzer-frequency can be adjusted by changing the potentiometer-position with a screwdriver (0,5 Hz - 4,8 Hz).

decrease buzzer-frequency

increase buzzer-frequency

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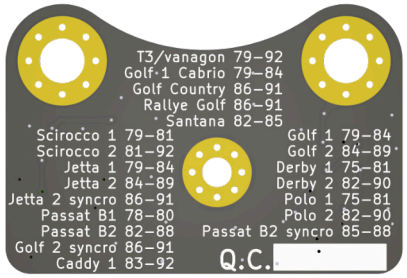
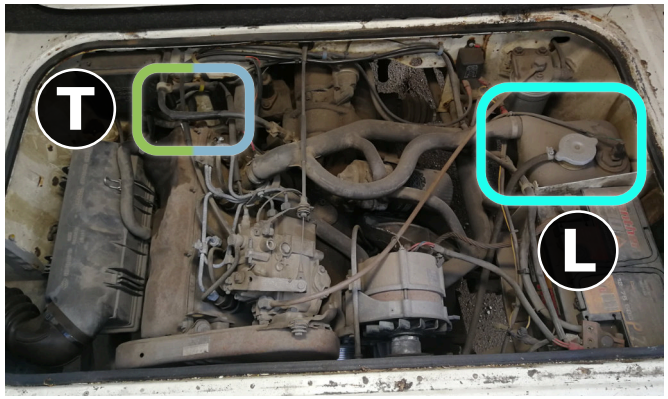



## Function test

The ignition key must be turned to the first position "Ignition on". The red LED flashes briefly.

Now the respective tests can be performed in the **engine bay**.




Depending on the car model, the temperature or level sensor is installed at different positions.

**The test illustrated here was carried out on a VW T3 1982.**



## T Overtemperature test

The temperature sensor for the display on the instrument cluster is located in the engine bay on the cooling water flange (the location of the sensor depends on the engine model).

There are several temperature sensor versions.

**single-pole water temperature sensor**

disconnect the **cable lug** from the temperatur sensor and hold it on **ground** (engine block, gearbox, chassis etc)

**two-pole water temperature sensor**

disconnect the plug and short-circuit both internal contacts of the plug with a **wire**

**test-result:**

- temperature needle indicates **maximum** value
- red LED flashes
- buzzer sounds

**Be sure to reconnect the plug/cable lug to the temperature sensor after the test has been carried out !**



## L Coolant level test

In the engine compartment, there is a plug for the level sensor on the coolant reservoir.

After this plug has been disconnected, the electronics signal a loss of water after a few seconds.

disconnect the **plug** of the coolant level sensor and wait a few seconds

**test-result:**

- temperature needle doesn't chance
- red LED flashes
- buzzer sounds

**Be sure to reconnect the plug to the coolant level sensor after the test has been carried out !**