

Low Coolant Alarms and Temperature alarms

THE FACT'S

Many Bongo owners worry about the history of the overheating problems suffered by the Marque.

Although these events do happen they are not as common as you might believe after browsing the forums.....only the broken down ones get reported. A well maintained cooling system is as good in the Bongo as any other vehicle...The general age of the average Bongo is part of the problem and should overheating occur it very often leads to expensive engine damage.

So...many owners decide to fit after market monitoring devices to their vehicles.

These are, as a general rule, broken down into 2 types.

Low Coolant Alarms

And

High Temperature Alarms

There are also **COMBINATION** Alarms

Lets start with the **Low Coolant Alarms**

Just the one really although they can be supplied for any water-cooled vehicle/engine 12 or 24 volt and have a relay feed to shut down Ignition or Fuel.

A very simple device that monitors the level of coolant around a "sensor". In the case of the Bongo this sensor is fitted through the side of the Expansion tank between the Full and Low levels. Should the level of the coolant drop below the sensor the alarm will activate and inform the driver by an audible and visual Alarm.

This system also informs the driver that all is well (or not) with the coolant level every time the ignition is switched on.

Very easy to DIY fit and 1500 Bongos fitted to date.

CON's None really

PRO's.....Should even a small amount of coolant be lost from your system (about a cupful) the alarm will sound very quickly indeed.....this will happen long before the temp starts to rise and if the leak is not a huge one and the expansion tank still has some coolant left (above the in/out pipes) then it is often a case of a patch up and top up to get home. If the leak has emptied the tank then it becomes a much bigger problem and will normally involve recovery and repair/bleeding of the system.

This alarm system will also check your level for you every time you switch on.



LOW COOLANT ALARM KIT Everything you need to fit this alarm is included

Note :- Making up your own system using “float” sensors has been done but I have no knowledge on their reliability.

This brings us to **TEMPRETURE ALARMS** and there are many available.

Temp alarms come into their own if the temp rises for reasons other than coolant loss (failed pump/blockage/air in system).

However, by the time the temp alarm goes off (if a Low Coolant Alarm is not fitted) almost all coolant will have been lost and although engine damage will probably have been prevented, you are well and truly broken down.

The **MASON** Alarm.....this system which uses the standard Bongo temp sensor to supply it's information causes the vehicle's temp gauge to become more active and actually moves the gauge needle up/down as the temp rises/falls, this is a big improvement over the standard gauge which has a (11 o'clock) dead spot from about 60C to 110C.

The **MASON** also comes with a small adjusting knob which can be set by the driver to give an audible alarm should the temp rise above normal.

PRO's.....Makes the gauge more meaningful Gives a high temp audible alarm. Reasonable cost.

CON's.....depends on the Bongo Temp sensor (if that fails then you have nothing)...only works when the sensor is immersed in coolant (air in the system could cause it not to work) ...Involves removal of the instrument cluster.

I do not have a photo of a Mason Alarm

The **BONGO GAUGE MODIFICATION** a very well respected forum member came up with this. It also makes the gauge more meaningful and active over the range 80c to approx 115c. It more or less does the same as the Mason Alarm (see above) but **DOES NOT HAVE ANY SORT OF AUDIBLE ALARM**.....pro's / con's much the same except the cost which is about 3p

The **TM-2 Digital temperature gauge/alarm** this is a 3 digit display unit that takes it's information from a "bolt on" sensor which can be placed anywhere around the engine (we recommend a vacant tapped hole on the back of the cylinder head..{see end of this document}) It can also give an audible oil pressure warning when this option is connected.



PRO's... Constant and accurate readout updated every 2 sec's....very simple to fit. Settable high temperature alarm with audible/visual alarm.

CON's ...only available with a RED display.....display flashes and some find this distracting at night.....like all led displays can be hard to see in direct sunlight (what sunlight)

THE CUBES.....These systems are extremely well made and are multi function.....2 types....The Cube and The Long Cube....both do the same jobs. They will measure 2 different temperatures and the vehicle battery voltage.....the 2 temp sensors can be In-hose/on-hose/bolt on. Or any combination depending on your requirements. Both temp readings have settable alarms and also a high/low volt alarm which will let you know if volts are high/low or the alternator is playing up. There are settable feeds for fan relays.

There is also a 3 temp unit (no volts)



Cube Alarm Watch Your Car's Engine

รูปขนาดเท่าของจริง

Temp1 95.9
Temp2
Vol
Fan

แสดงผล 3 จุดแบบสลับ

Temp1 93.3°C Temp2 79.2°C Volt 12.9 V

แสดงผล 3 จุดพร้อมกัน

Twins Temperature Sensors and Voltage Monitoring

Cube Alarm Watch Your Car's Engine

New! ใหม่นวัตกรรมที่คิดค้นเพื่อตอบสนองความต้องการ มี 3 สีให้เลือก แดง เขียวและส้ม

ขนาด
กว้างยาวสูง 70 มม. x 64 มม. x 27 มม.

Red
Orange
Green

70 mm
64 mm
27 mm
64 mm

Twins Temperature Sensors and Voltage Monitoring



PRO's Very accurate and robust units....available in 3 display ... colours....simple fit.

CON's Cost.....availability (a small stock so may be to order)

The (((i-alert)))



Very simple device that is so small it will fit in a spare switch blank. It displays both engine temp and battery volts....Settable high temp alarm and fan relay feed. Available in Green/Red and a horizontal version.

PRO's Very small.....cheap.....multi function.....super simple fit....audio/visual alarms.

CON's only 2 digit.....(over 99C goes into a code mode so still reads up to 130C).....dim display in sunlight.

COMBINATION ALARMS

This group of alarms combine the Low Coolant Alarm along with one type of Temperature Alarm

The TM-2 LCA Combo

This very popular “combo” is what it says.....a Low Coolant Alarm combined with the TM-2 all inside a TM-2 case.....does everything the other 2 do....Full protection and temp monitoring plus oil pressure alarm.



PRO's Maximum protection at a reasonable price....simple DIY Fit

CON's Non on the Low Coolant side.....but the con's of the standard TM-2 still apply

ESTC COMBO

This is a very small neat Low Coolant Alarm combined with a High Temperature “settable” alarm....Just a small knob which sets the alarm threshold between 85C and 115C....Very robust unit.



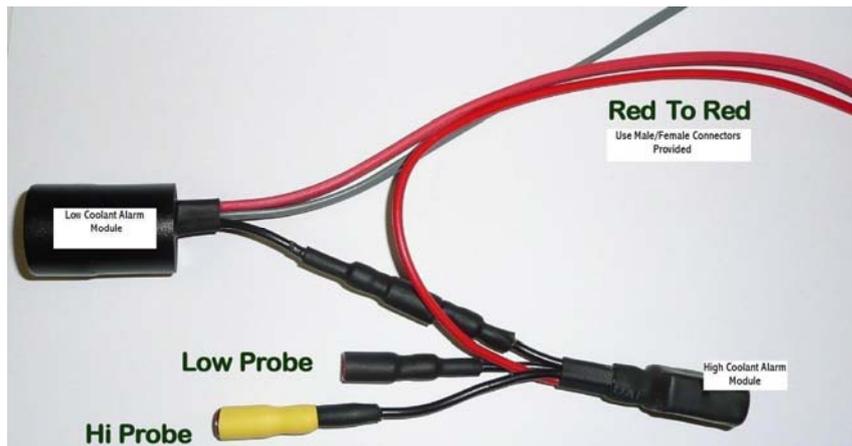
PRO's very small and neat....no flashing display.....very simple DIY fit.

CON's None really...It does what it says on the tin

In Addition to all the above systems.

The Hi Coolant alarm ADD ON

To fit this you MUST already have a Low Coolant Alarm fitted...There have been times when coolant has been ejected out of the header tank for “whatever reason” A Hi Alarm detects this and warns the driver.



PRO's If coolant erupts via the header tank due to “released air” this will warn you.

CON's chances are if this one ever goes off some engine damage may have occurred....however it may save more serious damage.

I have my TM-2 Where do I fit it...well ! any where you like, but many go for a BMW Clock....this neatly fill the space below/above your radio/CD.....



In the PIPELINE



Left to right

Low Coolant Alarm with remote LED

ESTC LCA/TEMP Combo

High Temp Alarm

LCA built in LED

Recommended temp SENSOR position.



There are also some other Digital cheap gauges available on ebay...However I don't think any of them have a built in alarm function so are of limited use...most are not backlit.

This FREE Information Sheet has been provided by Haydn from www.coolantalarm.co.uk/

Visit Bongo Forum www.bongoforum.co.uk no fee to download