

# **ALUMINIUM THERMOSTAT KIT FOR KV6 (2.0 or 2.5 liter) ENGINE**

(as used in Rover, MG and Land Rover Freelander.\* (slightly different fitting is used on the Land Rover engine and must be modified for normal hose clamps))



*Metal set installed. Don't use these original hose clamps, though.*



***The Plastic unit above, the metal unit under***

### **What do you get?**

A complete set comprising a **thermostat housing**, containing a **thermostat**, a **straight pipe** and a **curved pipe**, all **made in aluminium**, fitted with O-rings, and **ready to install**.

It is a direct replacement for the standard plastic components which tend to leak and split open, causing water loss and potential damage. Postage included to your address.

### **What else do you get?**

A handmade set assembled and tested with utmost care. Once installed, it will not split, crack and need replacement, before the thermostat itself gives up, which normally will take years. When that happens, the housing can be opened, and the thermostat itself can be replaced, the rest re-assembled and re-used. You just need the thermostat unit. That unit is a Calorstat/Vernet 6773, shown below, almost to scale, the diameter of the unit is 67mm on the middle disk, the widest part.

Additionally the thermostat will provide improved cooling during hot weather and you will have larger reserves of cold water in the system.

There is a lifetime warranty on the aluminium products, and a one year warranty on the thermostat itself. The cooling system must be provided with antifreeze/rust inhibitor.



***Calorstat/Vernet 6773.***

### **What else can you choose to get?**

You can specify the fitting for mounting a temperature gauge in the thermostat housing. You can get a separate gauge to go with that, and you can thus install an alternative temperature gauge where temperature information otherwise is inadequate. Ask specifically about that, if required.

### **What must you buy additionally ?**

In addition to this kit, you should buy **3 good quality hose clamps** and **two inlet manifold gaskets** (if you choose to remove the inlet manifolds). It is strongly recommended not to re-use the original hose clamps as they provide insufficient grip and will potentially leak coolant. It is possible to replace the thermostat without removing the metal inlet manifolds, but I suggest you remove them for two reasons. One, it is much easier to check the installation and install without damaging the O-rings, and Two, the gaskets are usually in poor condition, and can cause leaks into the two outer cylinders front and rear. It is well worth it making sure the metal manifolds are secured by adequately tightened bolts, and also that a re-torque is done after a couple of days. This is important to get right! The straight pipe has got two plastic retainers, preventing the pipe from moving. I don't think they will survive being taken off. **If you want to retain the pipe as originally envisaged, you can do that with two broad plastic cable ties or two additional hose clamps.** Note that the picture above has not got those installed.

The O-rings, if you need extra, are R4118, but any O-ring about 30mm in diameter and 3.5mm thick will normally do. You don't need special high grade rubber, but get a good quality from a reputable dealer. The worst the rings will see is about 110 degrees Centigrade (230 Fahrenheit)

and a pressure differential of maximum 2 Bar. Once installed, the rubber will be in compression, and thus unlikely to suffer from cracks.

### **The costs:**

There are two options:

**Surface mail from South Africa**, Danish Kroner 1310, usually 8 to 10 weeks

**Air mail from South Africa**, Danish Kroner 1410, usually 2 weeks

to Europe, UK, Australia, New Zealand, North America.

If you are outside these areas, postage times might be slightly affected and cost could be, if postage is markedly different. If in doubt, just ask.

### **Payment:**

**Paypal** to Kaj Pedersen, [kajpedersen@msn.com](mailto:kajpedersen@msn.com)

**Cash in a registered envelope.** Then the cost decreases by 60 Danish Kroner in each case, almost any currency can be used, but just ask.

**Bank Transfer**, ask for details, and make sure **the costs are known to you**. The amount in our account must be net of all costs.

**Before** you arrange for payment, please just check for availability and current price,

Normally a unit will be mailed within a few days of payment being received, but occasionally there can be a delay. The item is usually mailed in brown paper, taped securely, issued with the receivers address and sent registered, the mass is 1.3 kg. After the parcel leaves South Africa, it is impossible to track until it reaches the country of destination, where a new tracking number is usually given to the parcel. In cases of delay, the South African Post Office will only start tracking after certain periods have lapsed. Usually considerably longer than the normal postage time.

### **Have we ever lost a parcel or a payment.?**

**No**, so far so good, all has been received both ends, sometimes with exceptional speed, like 7 days for surface mail to Australia, but also with delays of up to a couple of weeks, often caused by strikes, go slow or other issues over which we have no control.

### **Can I fit it myself?**

Yes, if you think you can, **you can**. But have a look here, a very good guide by MrEdd:.

<http://www.mredd.me.uk/Photos/rover75/thermo/thermo.htm>

## **Does it work?**

Yes, several hundreds have been made and most have been fitted. There are units installed in Denmark, Poland, Hungary, Norway, Finland, Sweden, Holland, Luxembourg, Germany, England, Australia, Swaziland, Botswana, South Africa, Lesotho, New Zealand, Tasmania, Ethiopia, Canada, USA, United Arab Emirates and there might well be other places. The earliest units have been going for over 5 years. My own car has covered in the region of 75000km. It has not leaked one drop of water from the system.

## **Are there problems?**

Yes, but very few. I know of one unit where the thermostat failed in the open position prematurely. There have been some cases of damaged O-rings during installation and leaks have been reported from the fitting of the rubber hoses.

So it is important that plenty of lubrication is used when fitting the O-rings (thick soap, silicone, grease) and it is equally important that the hose clamps are tightened like you would on a metal pipe. The original clamps are designed to not over tighten on the softer plastic, and they are thus **not suitable** for re-use with this system. Use only new, good quality clamps, and tighten them properly.

## **What is the next step?**

Decide, and if you want a set, check pricing and availability. Pay, wait and install.

## **I'm still not sure, worried, I can't make up my mind.**

That is OK. Rome was not built in one day. It might not be for you. If you don't particularly like the car or the engine and don't want to keep the car, why bother?!

However, if the car is important to you, and if you plan to keep it with as little going wrong as possible, then this is most likely the most important component to improve.

*If you need more information, if you have any comments or just want to say hi, please feel free to write to me, it is always nice to hear from people all over the globe! :-)*