

From Richard Noble

Keeping Your (Engine Compartment) Cool

At a recent local autojumble, I bought two items for the vast amount of £2.50 which are helping the engine in my Citroën Dyane/Lomax Lambda to be cool, man ! The first was a spool of 2" wide micron foil self-adhesive tape (50p) - "Good for mending drainpipes", the man said ! This highly-reflective tape now adorns the inside of my car's bonnet, especially above the exhaust pipes. After a run in the heat of August, the bonnet, even within an inch of the pipes, is quite cold. Not sure what the fire retardency is like, but in terms of reflected heat from the GRP, it's perfect !

The other item was a 12v fan motor from a car heater - this now provides a boosting fan to extract hot air from over the engine when stationary in traffic etc. I had wanted to install such a fan, but conventional radiator cooling fans are either too big for this location or very expensive. The one bought (£2) was a 'blower' type and needed the casing to be removed and the fan to be replaced with ordinary plastic fan blades (cannibalised from a 240v machinery cooling fan - approx. 16cm diameter). It is located immediately below the front axle, facing downwards. It is compact, highly efficient, of relatively low power consumption and operated from an illuminated switch on the dashboard (ultimately I may fit a thermostat of some sort). It also seems to be well protected from water spray within the chassis housing. To install it, I cut away the vented sheet metal (the semi-circular bit) between the chassis box sections and have replaced this with rigid aluminium sheet, with a suitable hole for the fan blades, slightly to the nearside to avoid being below the gearbox. Bent strip metal forms a bracket which mounts the fan above this sheet - space is limited to clear the moving steering arms and axle above. The whole assembly is then fixed between the chassis with self-tapping screws (for subsequent access). It may be prudent to fit some form of grid over the blades to prevent damage from flying thistles or shredded rabbits across rally fields etc. ! Whilst air is drawn to the fan via the side wing/driveshaft orifices (excuse the smuttiness), there is still considerable draw over the pots at the front, certainly enough to create a good airflow ! One warning - don't switch it on over dusty roads - the car vapourises in a cloud - "Beam me up, Scotty !!!".

From Ian Sharpe:

Engine Temperature Gauges

Aircraft, microlights and 2CV racers all use Cylinder Head Temperature gauges. (CHTs). The thermocouple sender unit is a thin washer that fits between the head and spark plug. The two wires from the sender just attach to the gauge and need no other power supply. The wires are four feet long. Gauges come as 2" round or 2 1/4" square style. You can even have a dual gauge but this, of course, requires two senders. Gauge prices are from £28 to £52, with senders priced at £9 each.

	EXHAUST GAS TEMPERATURE 2C2 Range 700 - 1700°F £23.80		EGT SENDER 712-240w 712-20Wk £20.25
	CYLINDER HEAD TEMPERATURE 2C1 Range 100 - 1000°F £23.80		CHT SENDER 712-9w 10mm 712-8w 12mm 712-4w 14mm £8.90