

An electric fan for your J2

By Bob Farnum

As most J2 owners are aware, our cooling system relies on the thermosyphon principle to circulate the water and forward motion of the vehicle to cause air flow through the radiator. It is the lack of this forward motion that sometimes causes the engine to overheat. In fairness, it is only when stuck in traffic on a hot day that this can be a problem. In several thousand miles of driving my J2 this has only occurred a few times. Switching the engine off and on while creeping along usually keeps the temperature under control, but it is certainly not doing the starter any good. With a trip to France planned for June, I decided to install an electric fan and eliminate the potential overheating problems once and for all.

While hunting for a suitable fan it was suggested that I contact Kenlowe. Kenlowe manufactures a complete range of fans and temperature control equipment. During a visit to the Kenlowe factory in Burchetts Green I was able to decide on the fan which I installed in my J2. The twelve inch diameter shrouded fan has a total depth of three inches, which is well within the four inches available. I can report that the fan coped very well with continental temperatures and I no longer have to resort to the engine off/on exercise. If you are interested in a similar installation for your J2 here is how I did it.

Kenlowe manufactures a number of fan kits complete with thermal controls, switches and attaching parts suitable for mounting a fan in a wide variety of cars. As a 1932 J2 was not on the list I elected not to purchase a kit, but to make up my own kit of attaching parts. I simply purchased a Kenlowe part number KLM 1708 12 volt motor and part number 1720 12T suction fan and made up the parts shown on the drawing. I decided to avoid the complications of an automatic system and simply control the fan manually. No new holes were drilled in my J2 so if I was unhappy with the result or if I wanted to enter a purist 'concourse', I could return the car to its original configuration.

The drawing of the parts should be self-explanatory, but there are a couple of points worth mentioning. The rods are not the same length, the top one is longer than the bottom one. The two threaded lugs are silver soldered to the rods. The mounting brackets are dimensionally the same, but when bent will be right and left-handed and will only work on one side.

Installation

1 Make up the brackets and rods as shown on the drawing. Obtain eight 1/4 BSF nuts, four 1/4 BSF flat head screws 5/8 inch long, two 2BA hex head bolts 5/8 inch long, two 3/16 lock washers and an electrical terminal which will fit over a 1/4 inch diameter rod. In addition and depending on how you plan to run your wiring, you will require a switch, a 35 amp fuse and a fuse holder.

2 Remove and discard the top two 1/4 BSF flat head screws on both sides of the radiator. These screws hold the radiator surround to the radiator. Replace these screws with the four 1/4 BSF flat head screws which are 5/8 inch long. Install the mounting brackets.

3 Temporarily thread a 1/4 BSF nut on each end of the two rods. Attach each of the rods to the back side of the fan motor with a 5/8 inch long 2BA hex head screw and lock washer. The threaded lugs should be positioned as shown on the drawing. Note also that the top rod is longer than the bottom one. The electrical connections to the fan motor should be on the bottom. Remove the plastic sleeve around the wires which was supplied with the motor. Determine which lead should be the earth by applying power to the motor and noting the direction of fan rotation. Add the electrical terminal to the earth wire. Tape the wires to the lower rod. The switch and 35 amp fuse will be connected to the other line.

4 Slide the fan assembly rods into place on the brackets and add the four 1/4 BSF lock nuts. Adjust the position of the fan until it is centred on the radiator. If your J2 is the same as mine, the top of the fan should be very close to the top of the radiator core and approximately an 1/8 inch away from the core. If the fan is not in this position, carefully bend the rods to move the fan into position. Install the electrical terminal under one of the lower lock nuts. Tighten the 1/4 BSF lock nuts.

5 Check that everything is secure and the fan turns freely with no rubbing. Turn on the power and confirm that the fan rotates in the right direction.

6 That's it, the installation is complete. Now you can forget about the engine overheating unless you run out of water, lose a radiator hose or blow a head gasket. One caution - remember that the fan draws approximately 14 amps when running - if you forget and leave it running you will probably end up with a flat battery.

