

Ghibli Not Cooling Properly?

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SUMMER 1994

I just found that the two cooling fans in my car are not identical! That is, one blade must turn clockwise, one counterclockwise to push air toward the radiator. I don't know whether they were wired correctly before I removed them, but they were probably both turning the same direction. WRONG!

My Ghibli is a 1969 car with front mounted cooling fans. These fans have seven short blades projecting from a 4 inch diameter center hub. The parts book shows that four blade fans were also supplied, but I don't know whether they were designed the same way.

Following are instructions to check your fans for correct rotation.

The fans are wired as follows: Each fan has two wires. One wire is powered directly from the fuse, the other goes to one of the thermostats at the back of the radiator near the left top corner. Therefore, there is always power (when ignition is on) through the motors to the thermostats. As water temperature increases the thermostat contact closes, the circuit is grounded and the motor starts.

To energize a motor, remove the wire from a thermostat and momentarily touch ground. If it is difficult to remove the wire, touch one end of a jumper wire to the thermostat terminal and the other end to one of the thermostat mounting screws or other ground.

Check fan rotation while it is slowing down. Notice that each blade is twisted with one side toward the front of the car and the other side toward the radiator. The side of a blade toward the front of the car should be the leading edge of that blade when it is turning.

The motors are permanent magnet type so reversing the two power wires reverses fan rotation. Each motor is wired to a screw type terminal block so reversing the wires is easy with a small screwdriver.

Use caution if you try to determine air flow by holding your hand near the fans. I was misled into believing that a fan blowing forward was really blowing toward the radiator.