

Radiator Working Principle: The radiator is a pretty simple device. Aluminum radiators are used nowadays. It has a tank on both sides, and there is a transmission cooler inside the tank. This radiator has aluminum mesh. Aluminum ports have two port inlets as well as an outlet port. There are tubes mounted in a parallel arrangement inside the radiator. And the aluminum fins are attached to all of the tubes. The Radiator working is very simple. In the radiator, the coolant flows from the inlet to the outlet through many tubes mounted in a parallel arrangement. The hot water enters the radiator through the inlet port. And a fan is attached behind the radiator to cool down the hot water in the tubes. The fan blows the air and cools down the water. So the water is going to come out cooler than it entered before and then go back to the engine. Now it does that air is going to be feeding through this radiator. The aluminum fins are attached to the tubes this called tabulator. Now the tubes are filled with hot coolant coming from the engine. So they're going to give off heat to this aluminum coat by passing air through the fan, it cools the aluminum coat. If the smooth flow through the tubes, only the fluid would be cooled directly that actually touching the tubes. Now it is going to send out to the cooler and then go back to the engine. Its core is usually made up of flattened aluminum tubes with aluminum strips that zigzag between the tubes. These fins transfer the heat in the tubes to the air stream, to be carried away from the vehicle. One is mounted towards the top of the radiator to let the coolant in while the other is mounted at the bottom of the radiator on the other tank to let the coolant back out. On top of it there is an additional opening that is capped off by the radiator cap. In a liquid-cooled internal combustion engine motorcycles and cars, the radiator is connected to channels running through the engine and, through which a liquid (coolant) is pumped in the cylinder head. More commonly a mixture of water and .antifreeze is used as the liquid. Antifreeze is ethylene glycol or propylene glycol