

# OIL COOLERS

## TECHNICAL INFORMATION

### GENERAL INFORMATION

The oil cooler is a heat exchanger.

It is basically a circuit composed of aluminum alloy tubes of reduced diameter with cooling fins that increase the surface and therefore the heat exchange. This can be done using ambient air or using parallel circuits with special mixtures (glycols and water).

The forced passage allows to lower the oil temperature in order to keep its value constant which is necessary for the correct functioning of the gearbox, steering system and internal combustion engine.

One should remember that the lubricant, especially in an internal combustion engine, has two essential functions: heat removal and friction reduction of the moving parts.

### MAIN CAUSES OF BREAKDOWN

The breakdown of the exchanger can occur due to the corrosion of the plates, which causes the oil and the cooling liquid to mix. In practice it is always the oil that passes into the refrigeration circuit due to its greater pressure. Another frequent cause is the impact against other vehicles or obstacles.

The symptoms are easily recognizable by checking the cooling circuit tray: the color of the liquid mainly takes on the color of rust. The greater will be the amount of damage to the exchanger, the greater will be the amount of oil present

