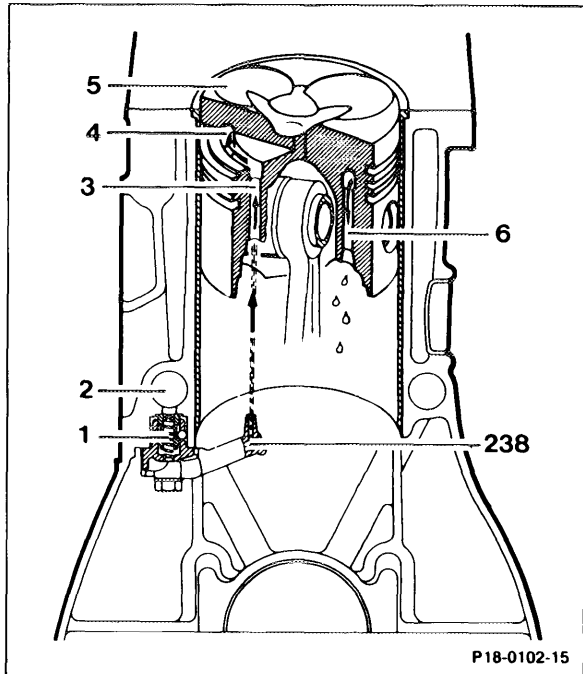


18-045 Function of oil spray nozzles

Turbo engine (except engine 603.970)

Above an engine oil pressure of 1.5 bar, valve (1) opens and allows engine oil to flow from the main oil gallery (2) through the oil spray nozzle (238) to the nozzle bore. The engine oil jet from the nozzle bore is directed at the inlet bore (3) in the piston crown. The engine oil is distributed in the piston crown along an annular bore (4) and flows back through the return bore (6) into the oil pan. When the oil is flowing through the piston crown, it absorbs heat and thus cools the piston (5). The valve (1) seals off the passage to the oil spray nozzle when the oil pressure drops to an engine oil pressure of less than 1 bar.



Naturally aspirated engine and engine 603.970 (Turbo)

On naturally aspirated engines, the oil spray flows out of the nozzle bore onto the piston crown and thus cools the piston.

