

LUBE-03, Oil Pressure - General Information and Troubleshooting Tips

The 944's oil pressure should run 4-5 bar at idle when the engine is cold. It will gradually decrease to 2-3 bar at idle as the engine oil warms to normal operating temperature. Once the oil is at normal operating temperature, the oil pressure should indicate around 4 bar at 5,000 rpm. It takes the oil longer to reach its normal operating temperature than the coolant. Therefore, don't be surprised if oil pressure continues to decline after the coolant temperature has stabilized at its normal operating temperature. Occasionally, you may see your oil pressure drop to less than 2 bar. This may happen on very hot days when the car has been driven particularly hard. You should be extremely concerned if the oil pressure dropped to less than 1 bar. This is indicative of an problem with the oil pressure indication or the oiling system itself. Under these circumstances, the car should not be driven until the cause of the low oil pressure indication is determined and corrected.

There are several things that may indicate a problem with the oil pressure indication. If your oil pressure is pegged high (5 bar) or won't indicate less than 4 bar at normal operating temperature, there is likely a problem with the oil pressure sending unit.

Problems with the gauge itself and problems which cause the oil pressure indication to fail low are very rare. A low oil pressure normally indicates an actual problem with the oiling system. One of the problems which may cause low oil pressure is a failed oil pressure relief valve. Although I've never tried it myself, I've read reports from others who have removed the relief valve and turned the engine over to verify that oil comes out the hole for the relief. If oil comes out of the relief hole, this indicates a problem with the relief. If no oil or very little oil comes out, this normally indicates a problem with the pump itself. If a problem with the pump is indicated, check for proper tension on the crankshaft pulley bolt. The crankshaft bolt applies force to a spacer which in turn tensions a gear that drives the oil pump. If the crankshaft bolt is loose the gear will not turn the oil pump. Low or no oil pressure can also be caused by a broken oil pump pickup tube. This is normally caused by excessive vibration when the motor mounts are bad. The oil pan must be removed to replace the tube.

If there is no oil pressure indicated when the car is started, the oil pump may have lost its prime. If this is the case, try removing the oil filter, pour oil down the center hole while rotating the crankshaft in the counter-clockwise direction to prime the oil pump. Then install a new oil filter. Then start the car to see if you have oil pressure.

Oil pressure which tracks normally but is lower than normal throughout the indicating range can indicate a leaking oil pressure relief valve or worn main and/or rod bearings.

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