



Ill. 3.5-3 (Lit. 3.5-6): The deposits in the oil filters, especially from the scavenge oil filter, can give important information as to the **condition of the engine and related problems**. Those of us who have performed an oil change with filter exchange on cars are *initiated* in this regard, the resemblance is obvious. In the oil filter system represented, “1” is the actual filter cartridge with the filter lamellas. “2” marks the (cover) lid of the filter casing for the purpose of exchanging the cartridge. “3” indicates a stop valve that limits the exit of oil when the filter cartridge is removed. The magnification reveals a small bit of filter surface at the side of the inflow, with **typical precipitated particles**:

“A”: non magnetic **metal chip** (if it was magnetic it would probably hang onto the magnetic chip detector).

“B”: **soot or coke particles**

“C”: **surplus sealing compound**

“D”: **mineral particle** (peening/blasting material from cleaning processes during new production and overhaul)

“E”: non metallic particle (**labyrinth hard facing**)

“F”: non magnetic **metal burr**, e.g., from labyrinth fins or from a worn out rolling bearing cage.

! The oil filter is an important diagnosis assistance.

