



**AUTOMOBILE ENGINEERING
19AUB301 – AUTOMOTIVE FUELS AND LUBRICANTS**

LUBRICATION

Lubrication is the admittance of oil between two surfaces having relative motion. The purpose of lubrication may be one or more of the following:

1. Reduce friction and wear between the parts having relative motion.
2. Cool the surfaces by carrying away heat generated due to friction.
3. Seal a space adjoining the surfaces such as piston rings and cylinder liner.
4. Clean the surface by carrying away the carbon and metal particles caused by wear.
5. Absorb shock between bearings and other parts and consequently reduce noise.

MECHANISM OF LUBRICATION

There are mainly three types of mechanism by which lubrication is done.

- (a) Fluid-film or thick-film or hydrodynamic lubrication
- (b) Elasto hydrodynamic lubrication
- (c) Boundary lubrication
- (d) Hydrostatic lubrication
- (e) Bearing Lubrication