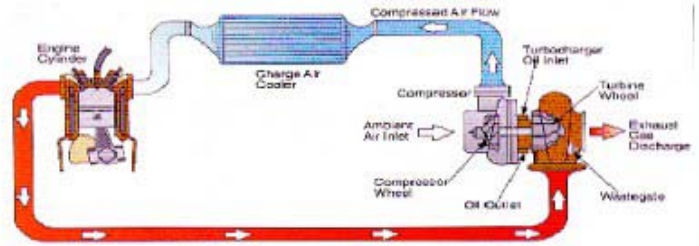


# TURBO FUNDAMENTALS

## Introduction

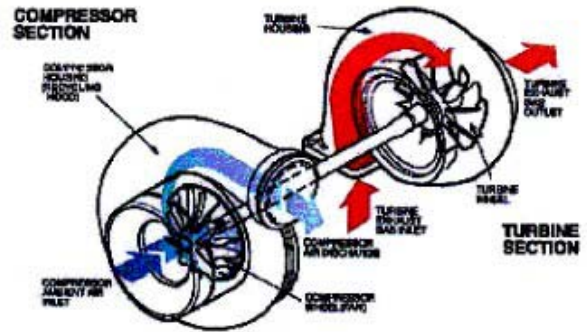
A turbo is a high precision 'air pump', used to supply more air into the engine by harnessing on the usually wasted energy in the engine exhaust.



## Principles of Turbo charging

The exhaust gases (red arrow) drive the turbine wheel and shaft, which is coupled to the Compressor wheel. When the compressor wheel rotates, fresh air (dark blue arrow) is forced at high pressure into the combustion chamber (light blue arrow).

With a high concentration of oxygen per cubic volume and optimum air-fuel ratio, combustion is now cleaner and more complete



## Benefits of Turbo charging

- Increases engine output and torque
- Lowers diesel fuel consumption
- Reduces harmful engine emission
- Uses more compact and lighter engines

