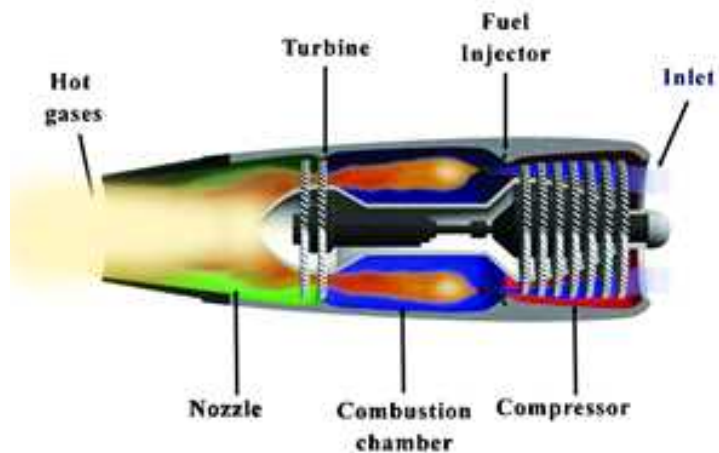


## SHEET THREE - POWER

Turbojet engines were used to power the land speed record vehicles. Jet engines create force or thrust by heating air that quickly expands and escapes from a nozzle.

The process involves:

1. Air enters the inlet and a compressor is used to increase the pressure and temperature of the air;
2. In the combustion chamber, fuel is sprayed into the compressed air and burned. The heat generated from the burning fuel expands the air;
3. This expanding air moves past the turbine that powers the compressor; finally,
4. Exhaust nozzle accelerates the air resulting in thrust.



The turbojets powering the Thrust SSC (Supersonic Car) are 5.2 metres long and little over 1 metre in diameter. Each weighs 1.8 tonne.

Your dragster uses a CO<sub>2</sub> cartridge for power. The cartridge contains CO<sub>2</sub> gas under pressure. The end is punctured so the gas escapes. This creates thrust or force in the opposite direction and that force will power your dragster down the track.

