

Catalytic Converter Notes

Stuff To Cover

- Catalytic Converter made out of Platinum or Palladium
- At about 500°C
- Hydrocarbons and Carbon monoxide oxidised in first chamber (*page 3*)
- Nitrogen monoxide reduced in second chamber (*page 3*)
- Products are: Carbon dioxide, water vapour, Nitrogen, Oxygen.
- Heterogeneous reaction (catalyst or contact) absorbs
A catalyst that is in a separate phase from the reactants (one or more)
(*page 3*)
- Other products (toxic products): Hydrogen sulphide (H₂S), Sulphur dioxide (SO₂) and Carbon dioxide (CO₂) already mentioned (*page 4*)
- H₂S – poisonous SO₂ – acid rain. CO₂ – greenhouse effect (*page 4*)
- Substrates – this is what absorbs the gases – further detail on actually catalyst (a substance in which another is absorbed) (*page 5* further info)
- Oxygen sensors (what tell of exhaust gases) on visual aid as zirconia sensor.

DON'T FORGET THAT WERE FIRST INTRODUCED IN 1970'S IN THE U.S.A. TO CONTROL EMISSIONS – ALL NEW CARS IN THE U.S.A. ARE FITTED WITH THESE.