

# Searching a naturally aspirated engine

- gasoline direct injection (GDI), also known as petrol direct injection, direct petrol injection, spark-ignited direct injection (SIDI) and fuel-stratified injection (FSI).
- variable valve timing (VVT) is the process of altering the timing of a valve lift event, and is often used to improve performance, fuel economy or emissions.
  - can be used with both direct and indirect injection
- best would be to find a indirect injection engine, like on Mazda 6 GH 2.0 pre-facelift (2008-2010) and all Mazda 6 GH 1.8 (2008-2012).
- VTi (Valve Timing injection) engines created by PSA Peugeot Citroën and BMW Group uses indirect injection
  - there are 2 variants, 1.4 with 95 bhp and 1.6 with 115bhp
- MIVEC is the brand name of a variable valve timing (VVT) engine technology developed by Mitsubishi Motors
- Honda VTEC ..
- Ford TI-VCT, non GDI
- PM (particulate matter) is produced only by engines with direct injection
- EURO 6
  - it is achived basically only with direct injection with very few exceptions
  - Toyota has some small 1.33 MPI EURO 6 engines
- EURO 5
  - most engines are designed with direct injection,
  - few exceptions for >1.6, like Mazda MZR 1.8i
  - easier to find for small engines, <1.4
- EURO 4
  - many engines can be found with indirect injection
  - but many use with direct injection, think about VW/Audi FSI

---

Revision #3

Created 30 March 2021 10:32:38 by Liviu

Updated 30 March 2021 11:07:41 by Liviu