



## TIPS & TRICKS

# Engine oil Sensor Applications All Engine types

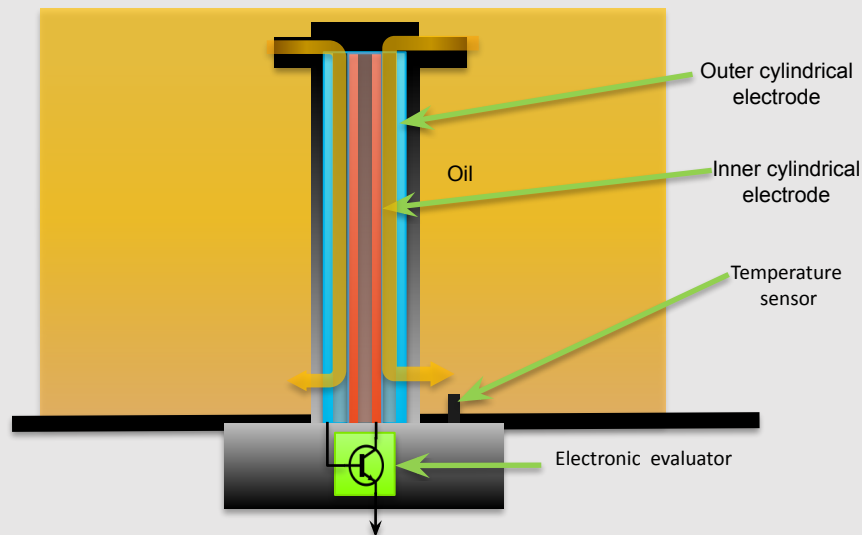
### Oil sensor benefits

- **Oil condition sensor** measures the following variables
  - Engine oil temperature
  - Oil level
  - Engine oil quality
- The sensor can determine the **properties** of the oil. These properties **alter** when the engine oil shows signs of **degradation** and **ageing**



### Oil condition sensor structure & how is it work?

- The oil condition sensor consists of 2 **cylindrical** condensers
- The condensers are **mounted** above **one another**
- The temperature sensor is **seated** on the **housing** of the oil condition sensor



#### How is it work?

- The electric material properties of the oil **changes** as its **wear & ages**
- The **change** in properties of oil will become **dielectric** which will change the **capacity** of the capacitor.
- The **electronic evaluator** converts the **measured capacity** into a **digital signal** which sent later to the **engine management system**, which is used for **internal calculations** for oil properties
- The oil level is measured by the **2nd capacitor** in the **upper part** of the oil condition sensor.
- It **register** the oil level with **engine running**
- The capacitor is at the **same** level as the oil level in the oil sump.
- As the oil level **changes**, the capacitance of the capacitor **changes**

