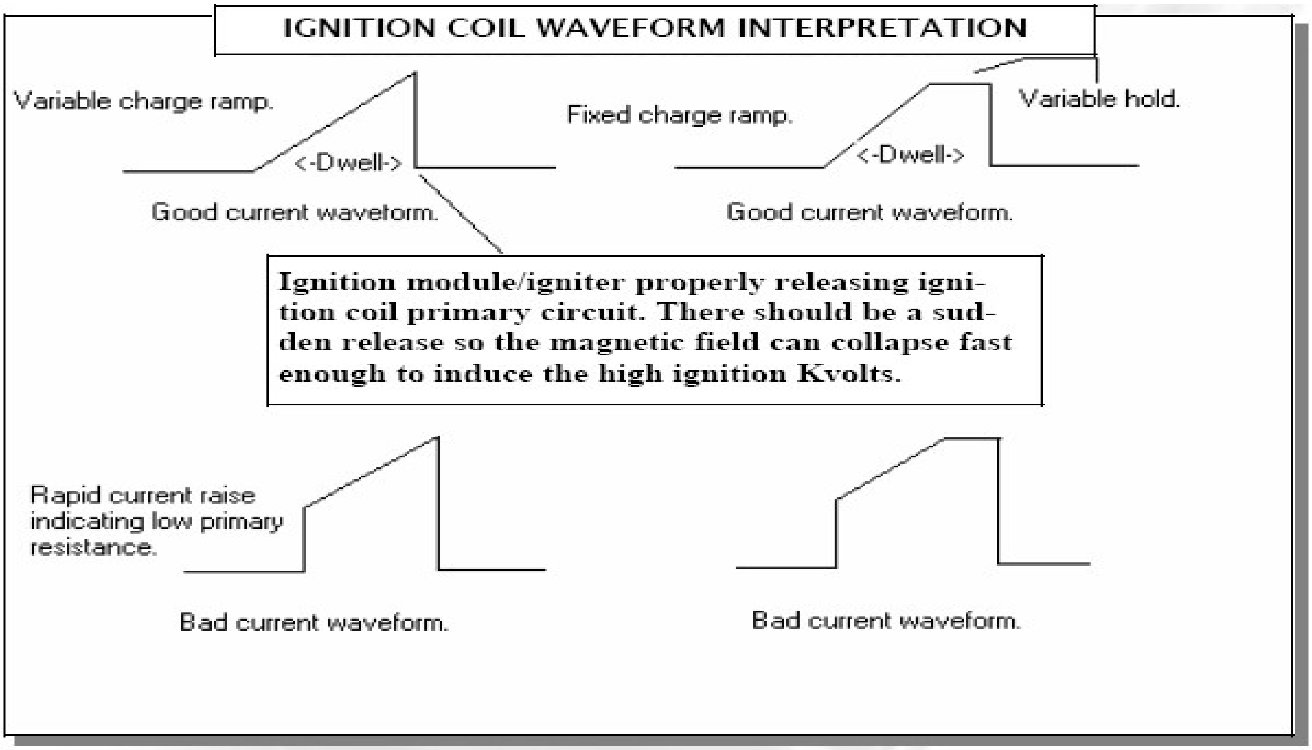
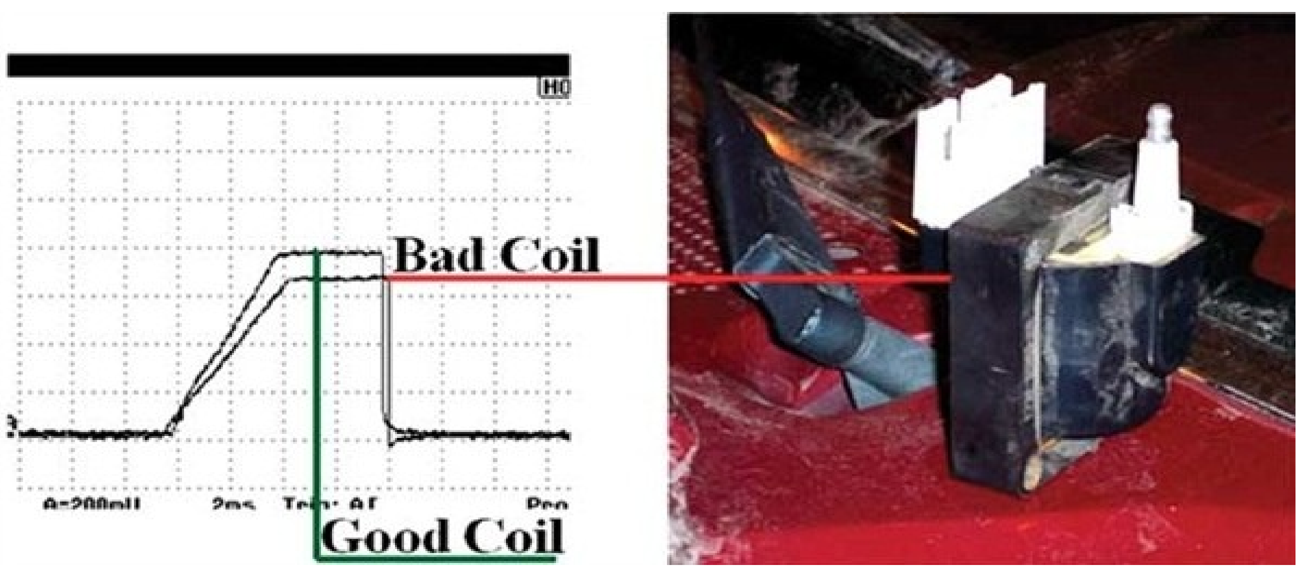
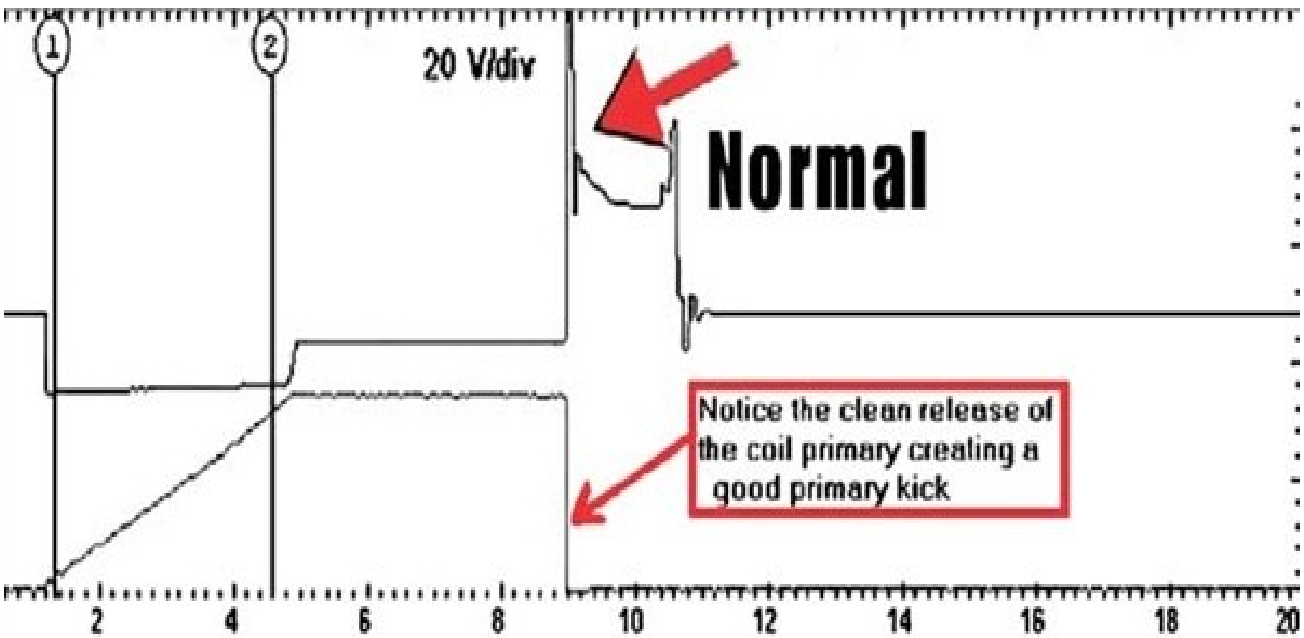


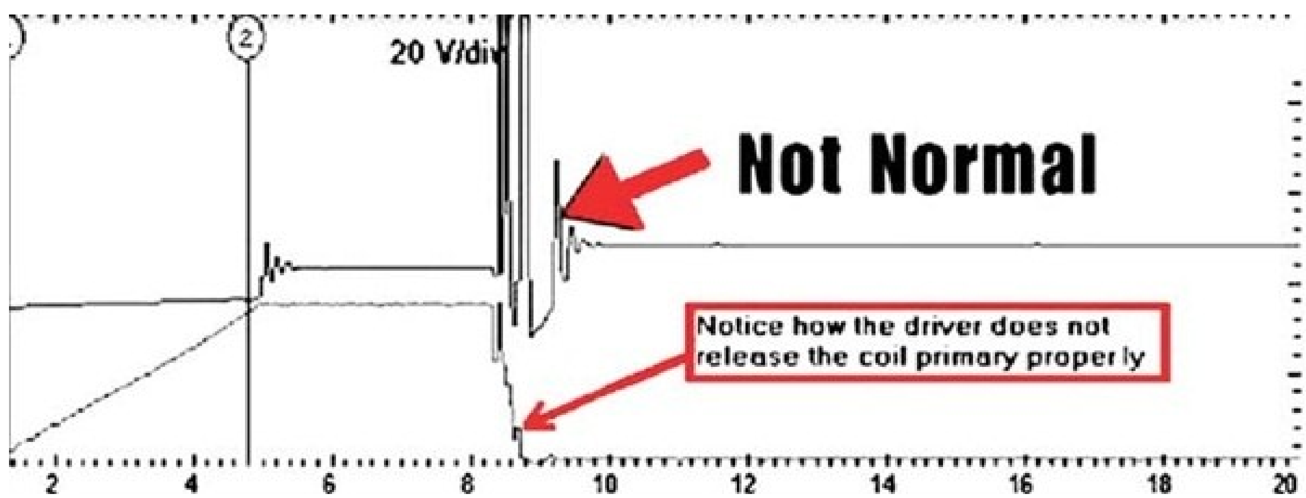
Fig 1 – Ignition coil current waveform.



Comparing voltage and current in primary waveforms

PCM is responsible for switching on/off the primary circuit. When the switch opens, it must open quickly to properly create spark. Slow switching reduces secondary spark intensity.





Why does the spark event look so bad in the below waveform? The current waveform tells us here. The amperage does not drop straight down during the firing event. It instead steeply slopes down. This means that the switch internal to the PCM/ICM is opening too slow. We just diagnosed a **bad module**.