

Inductive spark discharges on M8 spark plug (ISP)

Ignition coil

- Coil charge duration = 4 ms
- Primary energy = 61.5 mJ



Ford DG562

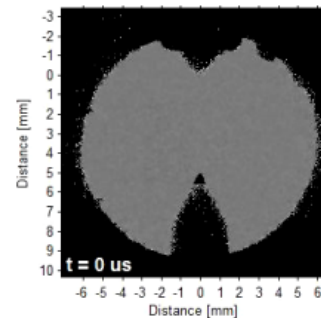


NGK ER9EHIX

M8 spark plug

- Discharge gap = 0.7 mm

Smooth early flame surface area propagation



Nanosecond spark discharges on M10 spark plug (NRP)

Pulse generator

- 2-5 pulses at 10 kHz
- Pulse width ≈ 10 ns
- Primary voltage = 19-26 kV
- Primary voltage and number of pulses were adjusted to obtain stable combustion when NRP is used



TPS SSPG-20X



NGK 7473

M10 spark plug

- Discharge gap = 0.9 mm

Highly wrinkled early flame surface area propagation

