

# Investigation of Fuel Quality Impact on the Combustion and Exhaust Emissions of a Turbo-charged SI Engine Operated on Low BTU Gases

Poster Location P-12

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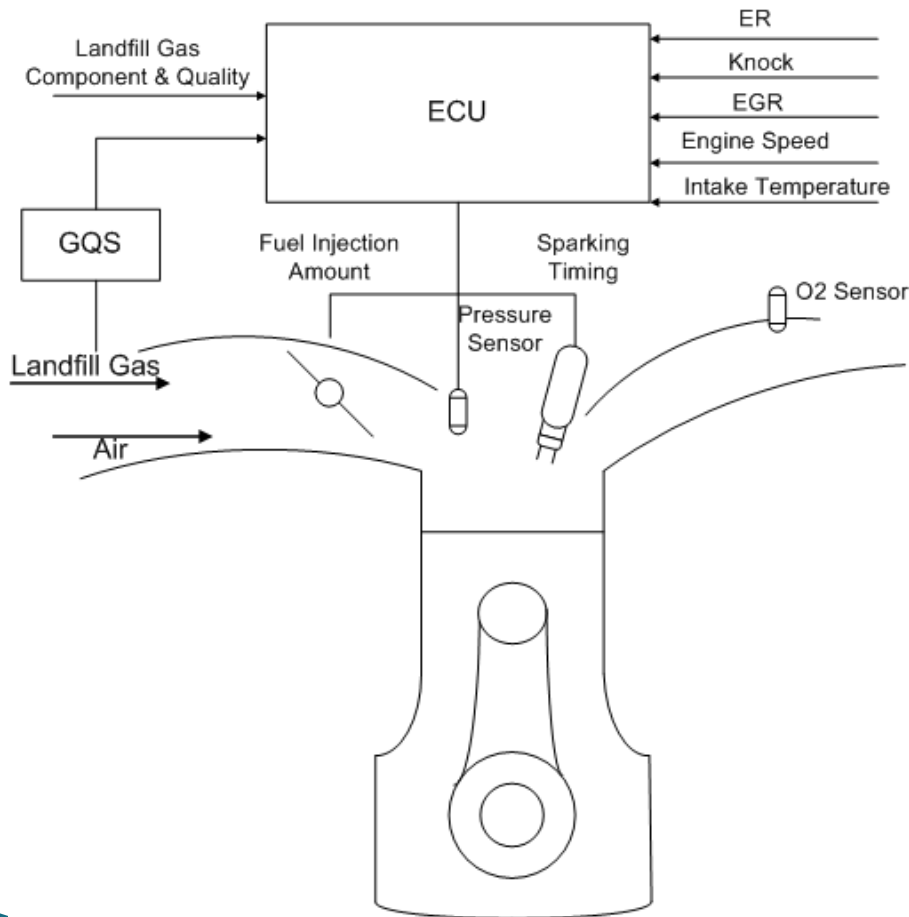
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# Schematic Configuration of SI Engine Operated on Low BTU Gaseous Fuels

## Gas Quality Sensor

Detect Gas Compositions and Measure Gas Heating Values



## Engine Test Matrix

Equivalence Ratio	0.56–1.0
Spark Timing	10–30
Intake Pressure	1.0–3.0
Engine Speed	1000–2000
N <sub>2</sub> in Fuel	0–60
CO <sub>2</sub> in Fuel	0–60