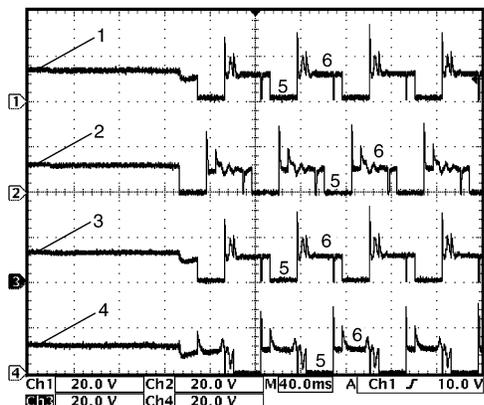


Reference waveform No.4

EGR valve signal

Measurement terminal	CH1: "C37-4" to "C37-58" CH2: "C37-3" to "C37-58" CH3: "C37-19" to "C37-58" CH4: "C37-18" to "C37-58"
Oscilloscope setting	CH1: 20 V/DIV, CH2: 20 V/DIV CH3: 20 V/DIV, CH4: 20 V/DIV TIME: 40 ms/DIV
Measurement condition	Engine at cranking



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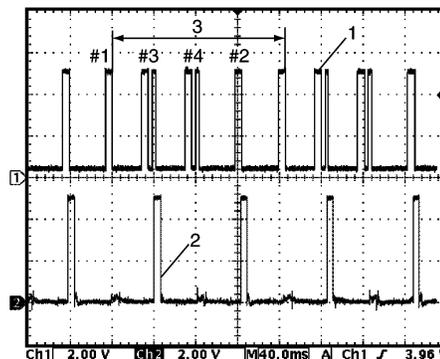
1. EGR valve stepper motor coil 1 signal
2. EGR valve stepper motor coil 2 signal
3. EGR valve stepper motor coil 3 signal
4. EGR valve stepper motor coil 4 signal
5. ON signal
6. OFF signal

Reference waveform No.5

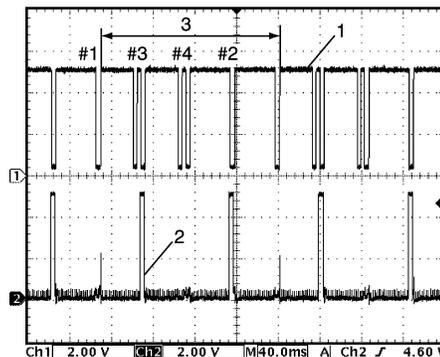
Ignition coil No.2 and No.3 signal (2) with engine idling

Measurement terminal	CH1: "C37-20" to "C37-58" CH2: "C37-5" to "C37-58"
Oscilloscope setting	CH1: 2 V/DIV, CH2: 2 V/DIV TIME: 40 ms/DIV
Measurement condition	<ul style="list-style-type: none"> • After warmed up to normal operating temperature • Engine at specified idle speed

[A]



[B]



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[A]: For engine with VVT
[B]: For engine without VVT
1. Cylinder reference signal (CMP reference signal)
3. 720° crank angle