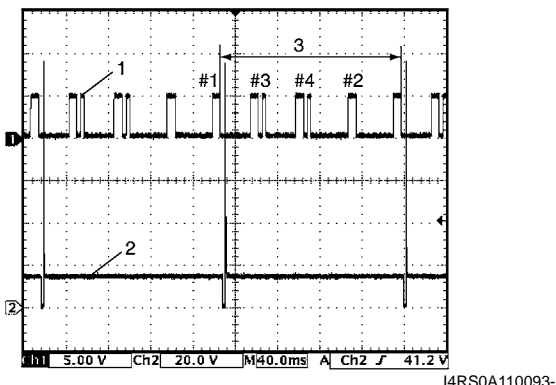


### Reference waveform No.14

No.4 fuel injector signal (2) with engine idling

Measurement terminal	CH1: "C37-20" to "C37-58" CH2: "C37-17" to "C37-58"
Oscilloscope setting	CH1: 5 V/DIV, CH2: 20 V/DIV TIME: 40 ms/DIV
Measurement condition	<ul style="list-style-type: none"> <li>After warmed up to normal operating temperature</li> <li>Engine at specified idle speed</li> </ul>

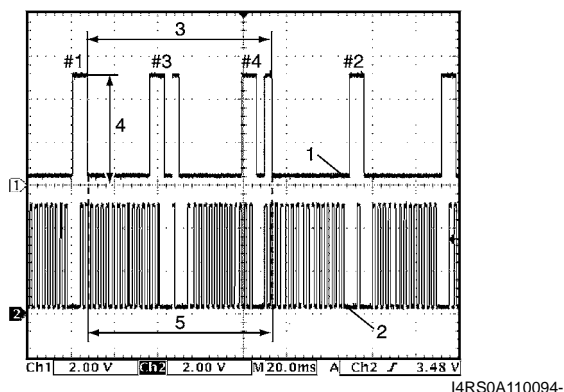


1. Cylinder reference signal (CMP reference signal)
3. 720° crank angle

### Reference waveform No.15

CMP sensor signal with engine idling

Measurement terminal	CH1: "C37-20" to "C37-58" CH2: "C37-21" to "C37-58"
Oscilloscope setting	CH1: 2 V/DIV, CH2: 2 V/DIV TIME: 20 ms/DIV
Measurement condition	<ul style="list-style-type: none"> <li>After warmed up to normal operating temperature</li> <li>Engine at specified idle speed</li> </ul>

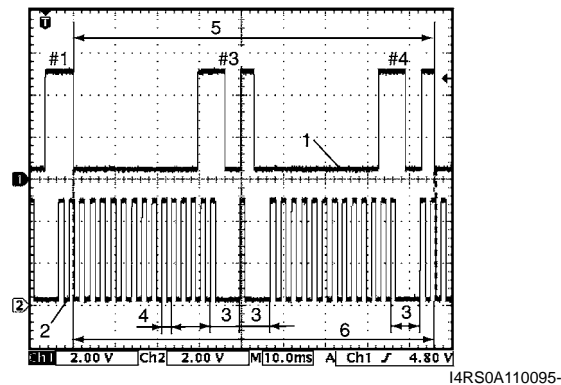


1. Cylinder reference signal (CMP reference signal)
2. CKP signal
3. 360° crank angle
4. 4 – 5 V
5. 36 – 6 = 30 CKP pulse

### Reference waveform No.16

CMP sensor signal with engine idling

Measurement terminal	CH1: "C37-20" to "C37-58" CH2: "C37-21" to "C37-58"
Oscilloscope setting	CH1: 2 V/DIV, CH2: 2 V/DIV TIME: 10 ms/DIV
Measurement condition	<ul style="list-style-type: none"> <li>After warmed up to normal operating temperature</li> <li>Engine at specified idle speed</li> </ul>

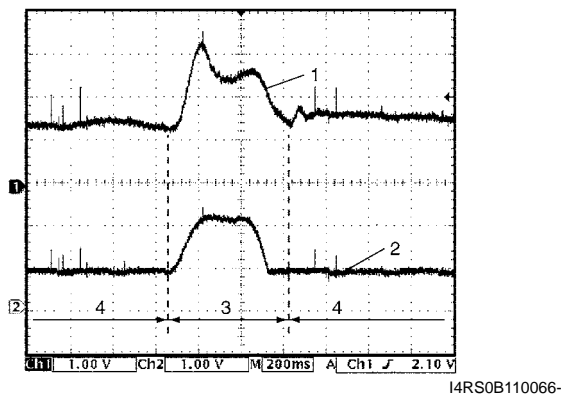


1. Cylinder reference signal (CMP reference signal)
2. CKP signal
3. 30° crank angle
4. 10° crank angle
5. 360° crank angle
6. 36 – 6 = 30 CKP pulse

### Reference waveform No.17

Mass air flow sensor signal (1) with engine racing

Measurement terminal	CH1: "C37-26" to "C37-27" CH2: "C37-54" to "C37-55"
Oscilloscope setting	CH1: 1 V/DIV, CH2: 1 V/DIV TIME: 200 ms/DIV
Measurement condition	<ul style="list-style-type: none"> <li>After warmed up to normal operating temperature</li> <li>Engine racing</li> </ul>



2. Throttle position sensor signal
3. Racing
4. Idle