

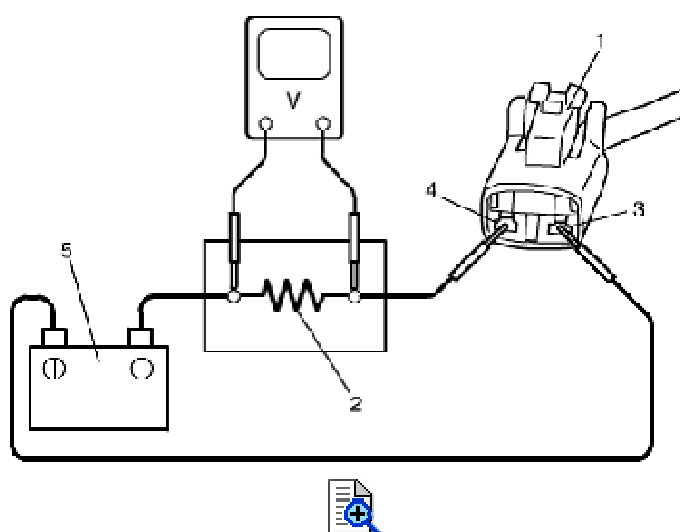
## Front and Rear Wheel Speed Sensor On-Vehicle Inspection

### Output Voltage Inspection

- 1) Disconnect negative (-) cable from battery.
- 2) Hoist vehicle a little.
- 3) Disconnect wheel speed sensor connector.
- 4) Disconnect wheel speed grommet from vehicle body.
- 5) Set up measuring devices as shown in figure, the resistance to 115  $\Omega$  and the power supply voltage to 12 V.

#### CAUTION:

**Incorrect voltage and/or wrong connection cause damage to wheel speed sensor.**



1. Wheel speed sensor connector	4. "BLK" wire terminal
2. Resistance (115 $\Omega$ )	5. Power supply (12 V)
3. "WHT" wire terminal	

- 6) Measure voltage at both ends of resistance without wheel rotation.  
If voltage is out of specification, check sensor, mating encoder and their installation conditions.

#### Voltage at the resistance (115 $\Omega$ ) without wheel rotation

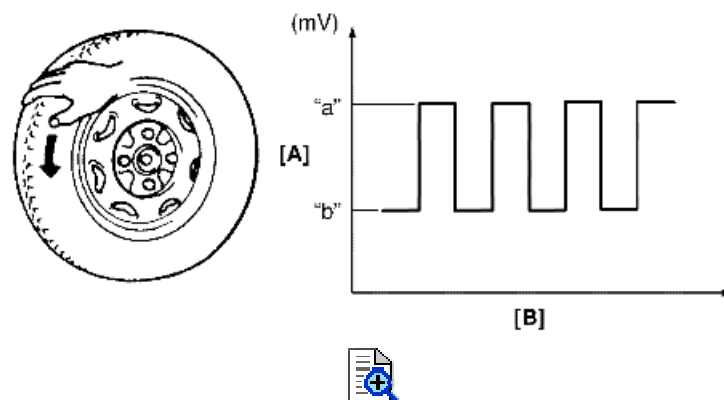
**680 to 960 mV**

- 7) Measure voltage at both ends of resistance with wheel rotation and confirm voltage alternately changes between high and low voltages.  
If voltage does not change with wheel rotation, check sensor, mating encoder and their installation conditions.

#### Voltage at the resistance (115 $\Omega$ ) with wheel rotation

**High voltage "a": 1360 to 1930 mV**

**Low voltage "b": 680 to 960 mV**



[A]: Voltage	[B]: Time
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## Reference

When using oscilloscope for this check, check if peak-to-peak voltage and waveform meet specification.

### Peak-to-peak Voltage at the resistance (115 $\Omega$ ) with wheel rotation

**High voltage "a": 1360 to 1930 mV**

**Low voltage "b": 680 to 960 mV**

