

Troubleshooting

DTC 11, 13, 15, 17: Wheel Sensor (Open/Short to Body Ground/Short to Power)

- With the ignition switch ON (II), the ABS indicator does not go off.
- With the SCS service connector connected (see page 19-119), DTCs 11, 13, 15, 17 are indicated.

Check for a short to power in the wheel sensor circuit:

1. Disconnect the ABS control unit 22P connector.
2. Start the engine.
3. Measure the voltage between the appropriate wheel sensor (+) circuit terminal and body ground (see table).

DTC	Appropriate Terminal	
	(+) Side	(-) Side
11 (Right-front)	No. 9: FRW (+)	No. 8: FRW (-)
13 (Left-front)	No. 7: FLW (+)	No. 6: FLW (-)
15 (Right-rear)	No. 19: RRW (+)	No. 20: RRW (-)
17 (Left-rear)	No. 17: RLW (+)	No. 18: RLW (-)

Is there 2 V or more?

YES

Repair short to power in the (+) circuit wire between the ABS control unit and the appropriate wheel sensor.

NO

NOTE: Judgement value for short to power is 2 V.

Check for a short to body ground in the wheel sensor circuit:

Check for continuity between the appropriate wheel sensor (+) circuit terminal and body ground (see table).

Is there continuity?

YES

- Repair short to body ground in the (+) or (-) circuit wire between the ABS control unit and the appropriate wheel sensor.
- Replace the appropriate wheel sensor.

NO

Check for an open in the wheel sensor circuit:

Check the resistance between the appropriate wheel sensor (+) and (-) circuit terminals (see table).

Is the resistance OK?
Front/Rear: 450 - 2,050 Ω
(at 20°C, 68°F).

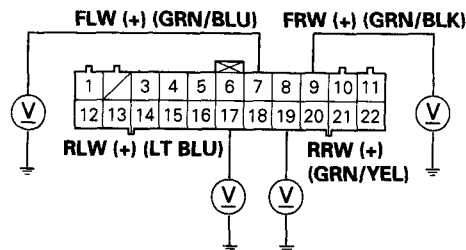
NO

- Repair open in the (+) or (-) circuit wire, or short to the (+) circuit wire in the (-) circuit wire between the ABS control unit and the appropriate wheel sensor.
- Replace the appropriate wheel sensor.

YES

Check for loose ABS control unit connectors, if necessary, substitute a known-good ABS control unit and recheck.

ABS CONTROL UNIT 22P CONNECTOR



Wire side of female terminals

