



Terminal and Connector Inspection

1. Many malfunctions in the electrical system are caused by poor harness and terminals. Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
3. Has a problem been found?

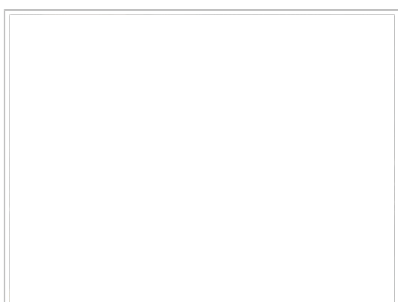
YES	<input type="checkbox"/> Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	<input type="checkbox"/> Go to "Charging System Inspection" procedure.

■ Charging System Inspection

1. Engine "ON"
2. headlight and heatwire "ON".
3. Measure voltage between terminal (+) and (-) of battery while maintaining ENG RPM 2,500RPM over 2 minutes.

Specification : Less than 17 [V]

Specification More than 10 [V]



4. Is the measured voltage within specifications?

YES	<input type="checkbox"/> Go to "Power Circuit Inspection" procedure.
NO	<input type="checkbox"/> Check that the tension of drive belt, ENG RPM, fuse, terminal of battery, all terminals of alternator are in good condition and Check for damaged harness and poor connection between alternator and battery. <input type="checkbox"/> Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

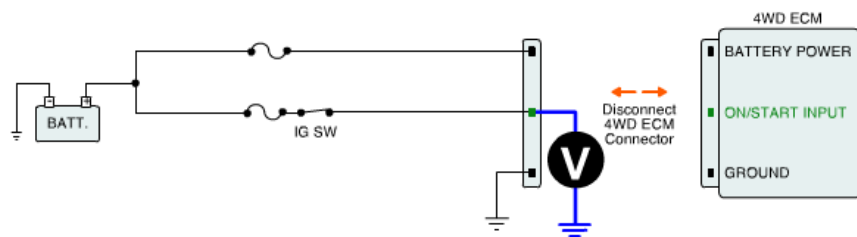
Power Circuit Inspection

■ Open or Short Check

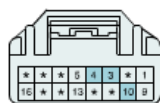
1. Ignition "OFF"
2. Disconnect 4WD ECM connector.
3. Engine "ON", headlight and heatwire "ON".
4. Measure voltage between battery power terminal of 4WD ECM harness connector and chassis ground maintaining ENG. RPM at 2,500RPM(idle) over 2 minutes.

Specification : Less than 17 [V]

Specification : More than 10 [V]



<4WD ECM>



3. BATTERY POWER
4. ON/START INPUT
10. Ground

5. Is the measured voltage within specifications ?

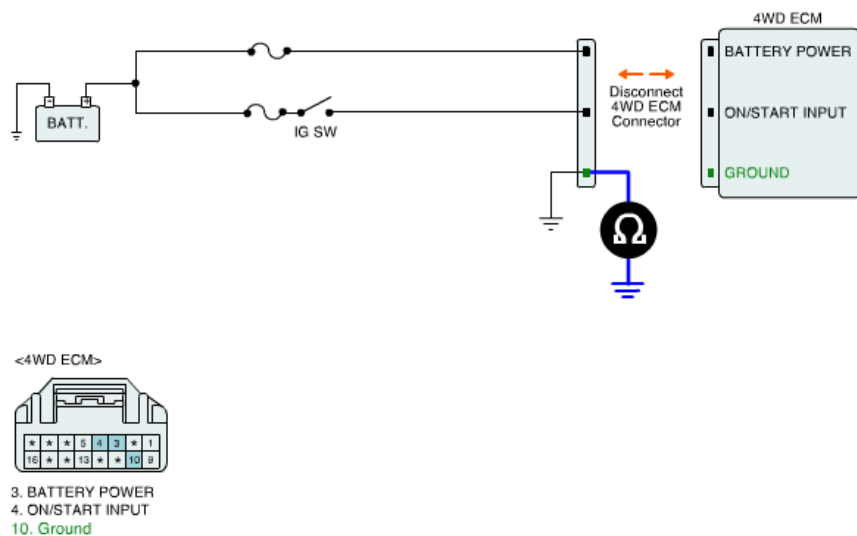
YES	<input type="checkbox"/> Go to "Ground Circuit Inspection" procedure .
NO	<input type="checkbox"/> Check for open or blown fuse referring to "Circuit Diagram". <input type="checkbox"/> Repair open or short in power circuit between battery and 4WD ECM harness connector and then go to "Verification of vehicle Repair" procedure .

Ground Circuit Inspection

■ Open or Short Check

1. Ignition "OFF".
2. Disconnect 4WD ECM connector.
3. Measure resistance between ground terminal of 4WD ECM harness connector and chassis ground.

Specification : Approx. 1.0 Ω



4. Is the measured resistance within specifications ?

YES	<input type="checkbox"/> Substitute with a known-good steering column & 4WD ECM assembly and check for proper operation . If the problem is corrected ,replace steering column & 4WD ECM assembly and then go to "Verification of Vehicle Repair" procedure .
NO	<input type="checkbox"/> Check for open or contact resistance in ground harness . Repair as necessary and then go to "Verification of Vehicle Repair" procedure .