



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 ?

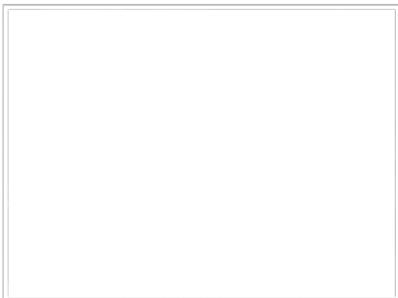
| | |
|------------|--|
| YES | <input type="checkbox"/> Repair as necessary and then go to "Verification of Vehicle Repair" procedure . |
| NO | <input type="checkbox"/> Go to "Charging System Inspection " procedure . |

■ 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 . |

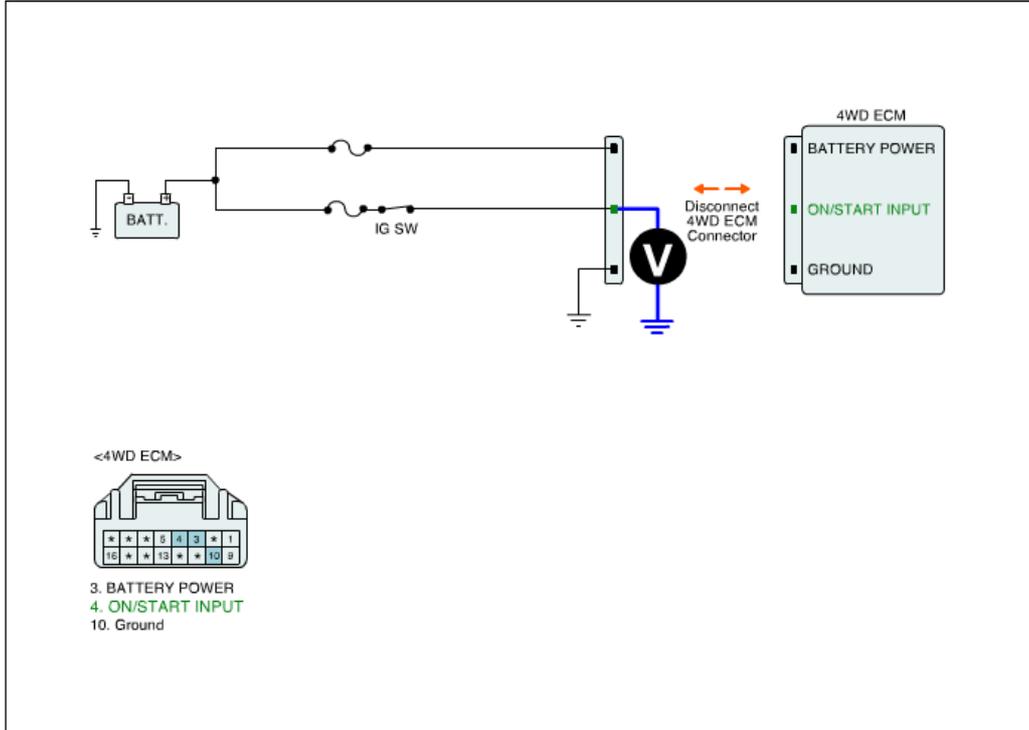
Power Circuit Inspection

■ 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]



5. Is the measured voltage within specifications ?

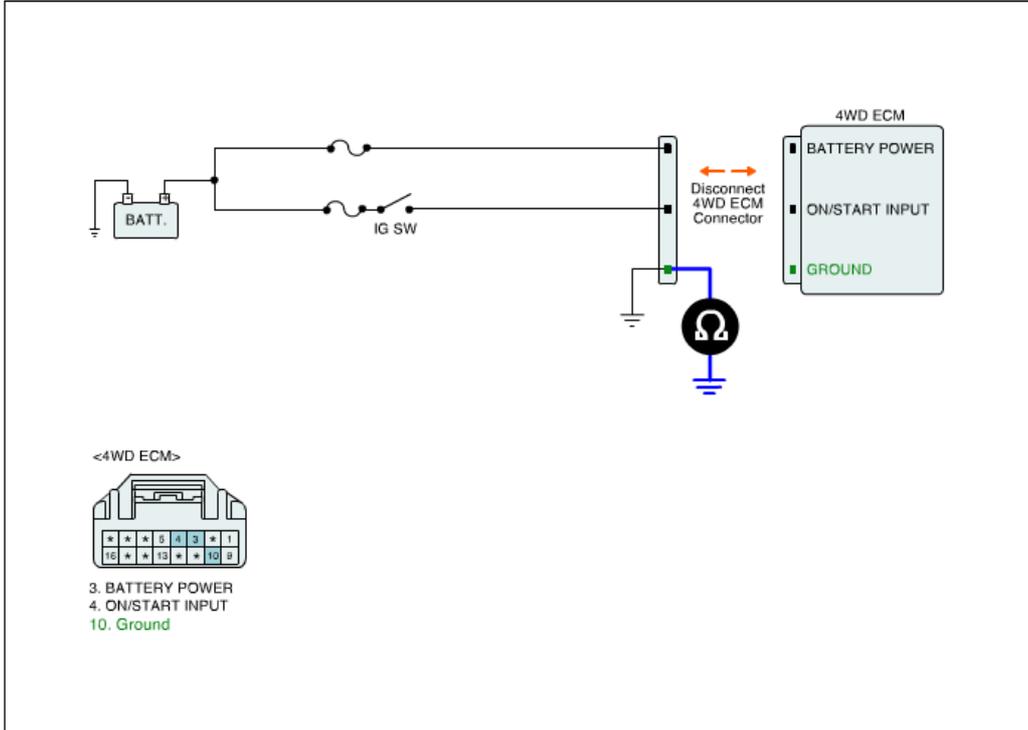
| | |
|------------|--|
| YES | <input type="checkbox"/> Go to "Ground Circuit Inspection" procedure. |
| NO | <input type="checkbox"/> Check for open or blown fuse referring to "Circuit Diagram". <input type="checkbox"/> Repair open or short in power circuit between battery and 4WD ECM harness connector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