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	□ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	□ Go to "Charging System Inspection" procedure.

■ Charging System Inspection

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

Specification : More than 10 [V]



4. Is the measured voltage within specifications ?

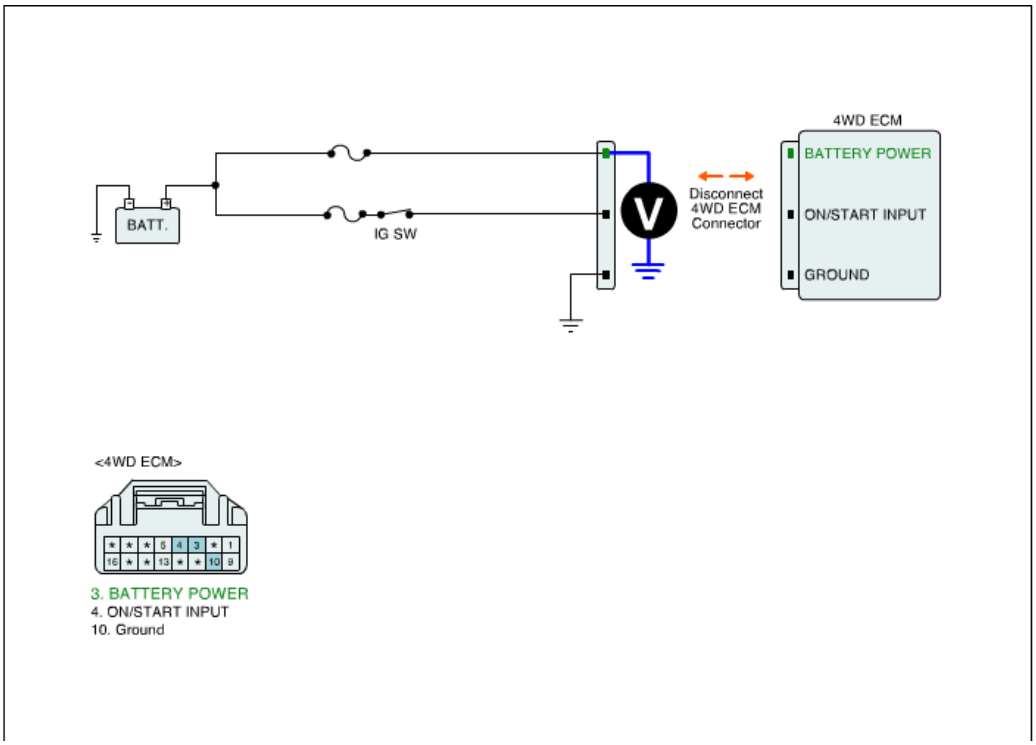
YES	□ Go to "Power Circuit Inspection" procedure.
NO	□ Check that the tension of drive velt, ENG RPM, fuse, terminal of battery, all terminals of alternator are in good condition and Check for damaged harness and poor connection between alternator and battery. □ Repair as necessary and then go to "Verification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

Power Circuit Inspection

■ Open or Short Check

1. Ignition "OFF"
2. Disconnect 4WD ECM connector.
3. Engine "ON", headight 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 : More than 10 [V]



5. Is the measured voltage within specifications ?

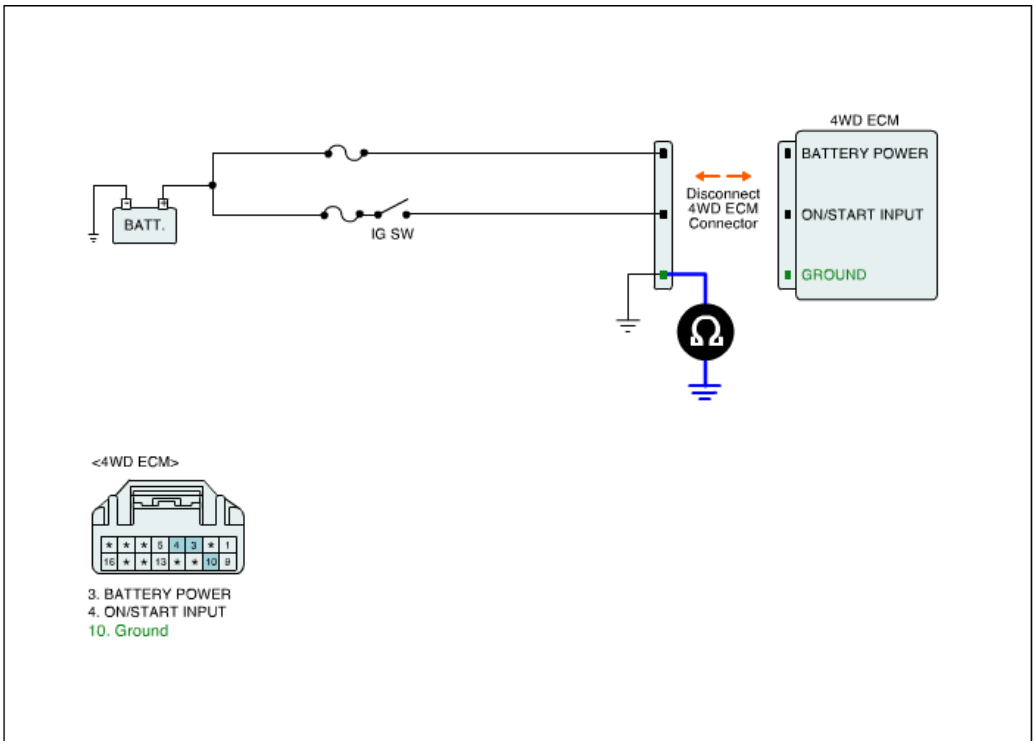
YES	□ Go to "Ground Circuit Inspection" procedure.
NO	□ Check for open or blown fuse referring to "Circuit Diagram". Repair open or short in power circuit between battery and 4WD ECM harness connector and then go to "Verification of vehicle Repair" procedure.

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	□ 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	□ Check for open or contact resistance in ground harness. Repair as necessary and then go to "Verification of Vehicle Repair" procedure.