

1. Perform starting system test with Starting/Charging System Tester.

**Cranking Voltage Normal**

2. Does the engine crank normally?

No

Yes

4. Does the starter motor turn?

No

Yes

Check ring gear  
and starter drive  
pinion.

Once resolved,  
perform battery  
test again.

3. Does the engine start?

No

Yes

Starter motor is OK.

Perform further  
diagnosis of  
engine mechanical  
or engine control  
system.  
Refer to EM and EC  
sections.

Once resolved,  
perform battery  
test again.

Starter motor  
is OK.  
INSPECTION  
END

**Cranking Voltage Low**

5. Compare the engine coolant temperature and the cranking voltage with the specifications.

Is the voltage less than the specified value?

Yes

No

6. Does the starter motor turn smoothly?

No

Yes

Starter motor  
is OK.  
INSPECTION  
END

7. Check "B" terminal circuit.

Is the "B" terminal circuit normal?

No

Repair as  
needed.

Yes

8. Check "S" connector circuit.

Is the "S" connector circuit normal?

No

Repair as  
needed.

Yes

9. Does the engine turn freely by hand?

No

Yes

Perform further diagnosis of engine mechanical or powertrain mechanism.

Once resolved, perform battery test again.

Replace the starter motor.