

# Car Starter Diagnostic Checklist (Mechanic Guide)

## Step 1: Check the Battery First

- Test battery voltage and cranking amps (CCA)
  - Clean and tighten battery terminals
  - Replace battery if older than 3 years
- Pro Tip: A battery can show 12.6V but still fail under load.

## Step 2: Listen to the Starter Solenoid

- Loud clunk but no crank → Starter motor or solenoid contacts
- No click → Check starter relay, ignition switch, and control wire voltage

## Step 3: Perform the Direct Jump Test (Solenoid Bypass)

- Safety: Car in Park/Neutral, parking brake ON
- Bridge the two large starter terminals
  - If starter spins → Solenoid is faulty
  - If no spin → Starter motor or ground problem

## Step 4: Inspect Cables and Grounds

- Check battery positive cable to starter
  - Ensure starter mounting bolts are tight
  - Inspect engine and chassis ground connections
- Corrosion is a common hidden cause of starting failures.

## Quick Troubleshooting Table

Symptom	Likely Cause	Next Test
Clicking sound	Weak battery	Load test battery
Slow crank	Corroded cables	Clean terminals
Loud clunk, no crank	Starter motor	Direct jump test
No sound	Relay or ignition switch	Check control circuit