Diagnosing Starting Problems

by Bill Unger

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When your LBC refuses to start for you in the morning as you get ready to go to school or work or to a car club gathering, it can be very frustrating to track down the source of the problem quickly enough to get on the road. Oh well, just leave the car in the garage and drive your more dependable (but boring) Japanese or American jelly bean sedan and tackle the issue another day.

But if you are already on the road and your LBC refuses to restart, then you are facing a potentially embarrassing and expensive prospect. You will have to either get the beast started again or you may have to call a flatbed to haul your beauty home and explain the event to a spouse who "told you so".

In either scenario, you need to keep a cool head and methodically hunt down the problem without jerking back and forth from one end of the car to the other as well as crawling under the scuttle and bonnet.

And if you are on the road, you may also have a limited arsenal of tools to assist. So gain a basic understanding of how your car works and follow this simple procedure that I use.

Ignition Switch in "ON" Position But Instruments Do Not Work, Then Check:

- 1) brown wire from battery to ignition switch #1 loose or disconnected
- 2) white wire from ignition switch #2 to hot side of fuse block #6-7 loose or disconnected
- 3) fuse #6 or #7 blown (windshield washer and wipers, horn, stop lights, backup lights, choke lamp, handbrake lamp, gauges)

Ignition Switch in "START" Position and Instruments Work But Engine Does Not Crank, Then Check:

- 1) brown wire from ignition switch #1 to starter solenoid relay 02
- 2) white/yellow wire from ignition switch #3 to starter solenoid relay WI
- 3) white/red wire from starter solenoid relay C1 to starter solenoid
- 4) black wire from starter solenoid relay W2 to ground
- 5) black wire from starter solenoid to ground

Ignition Switch in "START" and Instruments Work Except Tachometer and Engine Cranks But Does Not Fire, Then Check:

- 1) white wire from hot side of fuse block 6-7 to tachometer
- 2) white wire from tachometer to ignition coil

Ignition Switch in "START" Position and All Instruments Work and Engine Cranks But Does Not Fire, Then Check:

- 1) wires to ignition coil
- 2) high tension wire from ignition coil to distributor cap
- 3) faulty ignition points (no gap or burned contacts)
- 4) faulty points condenser or poor wire connection
- 5) faulty ignition coil
- 6) faulty fuel delivery (fuel pump not working or carb float needle stuck closed)

Engine Cranks But Will Only Fire If Battery is Boosted, Then Check:

- 1) poor battery cable connections
- 2) weak battery voltage below minimum required for electronic ignition even if engine cranks
- 3) long wiring runs or other causes of high resistance drops voltage below minimum required for electronic ignition

Engine Starts But Fires Erratically, Then Check:

- 1) high tension wire from ignition coil to distributor cap or spark plug wires or terminals loose, wet, cracked
- 2) faulty distributor cap (burned or broken contacts, cracked)
- 3) fouled or damaged spark plugs
- 4) faulty fuel delivery (low fuel pump pressure, clogged fuel filter, carburettor defects)

Engine Dies While Driving, Restarts Easily or Only With Key Jiggling, Then Check:

- 1) loose wires on back of ignition switch
- 2) burned or defective contacts within ignition switch

Keep a copy of this procedure (adapted for the specifics of your car) in your glove box along with a copy of your car's wiring diagram. As you gain familiarity with your car, make additional notes such as "relay located above starter" or "original brown wire replaced with red wire". Carry a flashlight, extra relays, lengths of spare wiring and crimp connectors, jumper wires with alligator clips, and basic tools to assist you. Good luck!

(Bill Unger is the editor of the Journal of Loose Nuts and Broken Bolts – the official newsletter of the Grand Strand British Car Club)

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