

# SELF-INFLICTED OPEN-CIRCUIT

POSTED PROTECTION FOR YOUR CORVETTE'S BATTERY.



**1** The lever-type battery disconnect switch; it has more electrical contact surface and is easy to operate, but it's bulky and requires more operating clearance. **2** The "green knob" disconnect switch; it's compact, but you need to ensure that the knob is loose enough to open the circuit and is tight enough to make good contact when closing the circuit.

## READER'S QUESTION:

I know it's a good idea to disconnect the battery when you're working on anything electrical, but it's inconvenient to remove the cable terminal from the battery every time I work on my '66. I see two types of battery disconnects for sale –

the one with a green knob, and the one with a lever on it; is there any difference between them, and should they be installed on the positive terminal or on the ground terminal?

## RESPONSE:

A battery disconnect switch makes it convenient to isolate the battery from any potential ignition-off draws (like a glove box light that doesn't turn off) during storage, and it's much more convenient to turn a knob or move a lever than to keep removing the cables from the battery terminals.

You also want to remove the battery as a power source when doing any work on the car that involves the electrical system, especially on earlier cars that have many unfused, ignition-off, battery-fed circuits and don't have fusible links on the primary power feed circuits; harnesses are expensive, and dead shorts can cause a fire.

There are proponents for both types of disconnect switches, and both types have their pros and cons. The "green knob" disconnect is smaller and takes up less space, but you need to make sure you have the knob unscrewed sufficiently to open the circuit when disconnecting, plus the knob must be tightened firmly for good contact when re-connecting. It also has the advantage of being a theft deterrent if you remove the knob entirely and take it with you.

The lever type has more contact surface between the

lever and the receiver legs for reduced resistance. It's more visually obvious when it's open or closed, and it only requires a single, simple motion to operate it. However, it's bulkier and can present installation/operation clearance issues where batteries are tightly packaged (like on '68-'82s).

Both types are designed to be installed on the negative battery terminal; the negative battery post is smaller in diameter than the positive post, and the disconnects have the smaller hole where they attach to the battery (and the smaller post size where the negative cable attaches to the switch). Why?

If you switch the positive side, it kills the power to the harnesses, but a ground path still exists back to the battery; if you drop a wrench and it touches the battery positive terminal and the engine, it'll create a 500-700-amp dead short you'll never forget, and it could damage (or destroy) the battery.

If you switch the negative side (as all the disconnects are designed to do) and drop a wrench that touches the battery positive terminal and the engine, nothing will happen, as there is no ground path from anything in the car back to the battery to complete the circuit. That's why the disconnects are designed to be installed on the negative (ground) side of the battery.

Which type you choose is a matter of personal preference, but by all means install one; they're a great convenience. ■