

ACCEL 300+ IGNITION SYSTEM

TROUBLESHOOTING GUIDE

BOX WILL NOT FIRE:

- The 300+ Ignition box must be grounded. The black ground wire is not enough, as digital systems are more sensitive to a clean ground contact. We suggest running the ground lead (black wire) directly to the engine block. If the ignition box is not mounted to a good ground, a separate ground wire should be run to one of the four mounting holes on the box.
- Solder all connections and shrink wrap for maximum reliability!
- Dip-switch #4 must be down for the box to fire. The *only* time #4 switch is positioned up is when using the ACCEL 3-Stage Rev-Limiter or ACCEL Timing Computer.
- Check to be sure that there is a full twelve volts power supply to the red wire from the 300+. Do not use a ballast resistor or resistor wire, even with points or Mallory 3-wire distributors.
- Check the fuse on the box, and on the ignition circuit in the vehicle's fuse panel.
- Accel 51000 series distributors require the removal of the ignition module in the distributor. Remove the cap and rotor. The ignition module is located in the upper bowl of the distributor, under the cap and rotor. It is the half-moon shaped piece (either black or green) with four wires connected to it. Remove all four wires from the module (they're connected with spade connectors), and remove the module from the distributor. The remaining piece is the magnetic pickup (it has two wires going to it). Check the air-gap between the magnetic pick-up and the reluctor (eight pointed wheel in the center), it should be between .005"- .007". Connect the red wire to the orange wire from the 300+, and the green to the purple from the 300+. Follow the schematic for Accel

Magnetic Pickup Distributors for the rest of the wire connections.

- Mitsubishi/Nissan/Datsun - See the section below under “tachometer does not work.”
- *If the Ignition System fires, but the timing is severely retarded* (20 degrees), the wires from the magnetic pickup or crank trigger pickup are likely crossed. Reverse the connections on the orange and purple wires.
- *1987 and up GM with remote coil, 1992 and up LT-1 Corvette, 1993-95 Camaro* - The factory coil has two interlocking connectors plugged into it. Both must plug into the ACCEL custom harness supplied. There will be only one connector (with pink and white wires) plugged into the ACCEL coil when installation is complete - leaving one empty socket in the new coil. This is so that the coil can be used independently of the 300+ box.

ACCEL 300+ FIELD TEST

WARNING!!!

SEVERE SHOCK HAZARD!!!

1. Disconnect the coil wire from the distributor and locate the terminal 1/2-1 inch from the engine block.
2. Disconnect the distributor wiring harness
3. With the ignition switch on, tap the white wire from the 300+ onto a ground, such as a header pipe or exhaust manifold. The coil should arc each time the white wire is grounded. Use extreme caution when performing this test.

Tachometer does not work:

- Most aftermarket tachometers work when wired to the green wire from the 300+. Most factory tachs will work when hooked to this wire or when using the custom harness supplied in some kits. If the tachometer still fails to function, connect the tach to the white wire from the 300+. If the tachometer still does not function, You may need a tach-adapter. Contact your tach manufacturer or ACCEL for more information.
- Some VDO tachs require the use of a 220 Ohm 1/2 Watt resistor, one side wired to 12 volts and the other side to the green wire from the 300+ AND the tach lead wire from the VDO. Contact VDO to be certain that this is required before installing the resistor.
- Many newer GM applications, especially LT-1, require the tach filter in the vehicle's factory harness to be bypassed. It is usually located close to the coil on the coil negative lead going back into the vehicle's engine harness. Consult the factory service manual or call ACCEL for more information.
- Nearly all Mitsubishi/Nissan/Datsun vehicles require the use of ACCEL's tach adapter. Tach adapters from other manufacturers do not supply a signal that the injection system will recognize. The vehicle also will not start; without a tach signal the injection system does not know that the engine is cranking and will not supply fuel. Contact an ACCEL dealer for this part or call ACCEL.
- ACCEL's tach-adapter is also required for some mid-eighties Ford applications, particularly Mustang SHO, .