



- 14,000-volt and 20,000-volt output for smoother ignition
- Solid state technology yields high performance, long life and durability
- Constant-duty rated
- Low current draw saves electricity
- Epoxy sealant provides water resistance and heat dissipation
- Consistent voltage output across a wide range of input voltages
- Easy testing — 41000 ignitor spark can jump  $\frac{3}{4}$ " gap

# MODELS 41000

## 40700 & 40900

14-KV & 20-KV continuous-duty  
Electronic ignitors

## Data sheet

### Installing and wiring

**WARNING** Carlin ignitors and ignitor kits must be installed and serviced only by a qualified burner service technician. Always disconnect power source before wiring to avoid electrical shock or damage to electrical components.

1. Carlin 41000 series ignitors can be mounted directly on top of the burner housing or other location, in the same manner as standard transformers. See back side of this sheet for available mounting plates and kits.

**WARNING** Mounting **40900** ignitors — **Mount 40900 ignitors ONLY on burner cover plate** so air blows across bottom of ignitor at all times during operation. Consult factory for details.

2. Disconnect electrical power to the burner. Disconnect wires from primary control to existing ignition transformer or ignitor.
3. Remove any screws securing ignition transformer or ignitor.
4. Observe the routing of electrical wiring from burner junction box to ignition transformer or ignitor.
5. Remove existing ignition transformer or ignitor.
6. Install new ignitor, reversing the above steps. Install, connect and route the ignitor wiring the same as the original ignition transformer or ignitor wiring was installed.
7. Make sure the ignitor is firmly attached and that all electrical connections meet local codes before applying power.

### Field check

**WARNING** Never test an ignitor by placing a screwdriver (or other metallic object) across the high voltage clips. Check 40700 & 40900 ignitors only by observing spark at appliance ignition electrodes, with fuel supply **OFF**. Using any other method could cause ignitor damage and severe personal injury.

1. Checking 41000 ignitors only:
  - Disconnect electrical power to burner.
  - Remove hold down clips or screws. Lift ignitor mounting plate to the full-open position. Set high voltage clips to a B<sub>1</sub>" to C<sub>1</sub>V" gap.
  - Carefully energize ignitor and check for spark arcing at the high voltage terminals. If spark jumps the gap, ignitor is good.

Ignitor Model	41000	40700	40900
Power Input	120 VAC, 60 HZ, 40 VA	208-240 VAC, 50/60 HZ, 60 VA	12 VDC, 50 VA
Ignitor Output	14 kV, 35 mA RMS	14 kV, 35 mA RMS	20 kV, 28 mA RMS
Secondary Grounding	Midpoint	Midpoint	Midpoint
Operating Temperature Limits	+32°F to +140°F	+32°F to +140°F	+32°F to +140°F
Storage Temperature Limits	-40°F to +185°F	-40°F to +185°F	-40°F to +185°F
Agencies	UL Recognized United States & Canada	NA	NA