EZGas Pro

Conversion Burner

Converts Oil-Fired Appliances to Natural Gas or Propane

- Fires From 50,000 to 275,000 BTUH
- Ideal for
  - Boilers - Pin-Style, Steel, Three-Pass
  - Warm Air Furnaces
  - Direct-Fired Water Heaters
- Faster, Easier and More Cost Effective than Replacing the Heating Appliance
- UL Listed

Carlin
Combustion Technology, Inc.
The Carlin EZGas Pro burner was designed to convert oil-fired appliances to natural gas or propane. When the existing oil appliance is in good operating condition, the EZGas Pro burner is fast and easy to install and provides a significantly less expensive alternative to replacing the heating appliance. With an input range of 50,000 to 275,000 BTUH, the EZGas Pro is ideal for virtually any residential conversion. The EZGas Pro fires refractory or non-refractory chambers and accommodates chimney vent, direct vent, or power vent applications. The 3 1/2" diameter air tube fits any heating appliance including furnaces, direct-fired water heaters, pin-style, steel, and three-pass boilers. The EZGas Pro burner is a UL Listed conversion burner meeting the code requirements for gas conversions in most areas.

- Compact flame pattern ensures clean, quiet operation
- Easy color-coded wiring
- Durable spark ignition with flame rod rectification
- Operates in low and fluctuating gas pressures
- Mixes fuel inside the combustion chamber for safe reliable operation
- Advanced 60200FR Primary Control

## Burner Configurations

### Appliance Specific Burners
Carlin offers a wide range of burners factory-configured for specific oil-fired appliances; all tested and approved in the Carlin Combustion Lab. For fast, easy installation, these burners feature a welded mounting flange, mounted diffuser plate and air band, and a pre-drilled orifice. Approved applications include:

<table>
<thead>
<tr>
<th>Brand</th>
<th>Model</th>
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<tbody>
<tr>
<td>Buderus</td>
<td>Slant Fin</td>
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<tr>
<td>Energy Kinetics</td>
<td>Boyertown</td>
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<tr>
<td>Peerless</td>
<td>Bock</td>
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<tr>
<td>Smith</td>
<td>QHT/Biasi</td>
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<tr>
<td>Weil-McLain</td>
<td>And more!</td>
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Consult factory or carlincombustion.com for model availability.

### Universal (Full BTU Range) Burners
Carlin Universal Burners are available in two models – Both include an adjustable mounting flange, all three diffuser plates, both air bands, and a field-drilled orifice. The only difference between the two is the air tube length. One model is equipped with a 10" tube, more than adequate for the insertion depth on most boilers. The other model has a 14" tube better suited for deeper insertion depths typical in warm air furnaces. These universal burners can be configured in the field to accommodate a wide variety of heating appliances. Carlin’s Tech Support Team is ready to provide suitability and application assistance.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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<tbody>
<tr>
<td>9859210FRU</td>
<td>Universal EZGas Pro with 10&quot; Air Tube</td>
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<tr>
<td>9859214FRU</td>
<td>Universal EZGas Pro with 14&quot; Air Tube</td>
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</tbody>
</table>

Carlin also offers adjustable flange, field drilled orifice burners with combinations of air tube length and diffuser plates that are common to many heating appliances. Consult factory for more information.

### 60200FR Primary Control
Carlin’s Model 60200FR gas burner primary brings state of the art technology to our trusted control. Designed and made right in the U.S., this control sets the bar high for all gas primaries. Its on board LCD screen displays the current burner status as well as any fault messages. Along with its ability to record fault history up to 50 fault cycles, the 60200FR makes servicing that much easier.

#### Features
- LCD screen displays burner status as well as fault messages.
- On-screen micro amp readings.
- Built-in diagnostics to identify component failures.
- Stores detailed fault history up to 50 fault cycles, taking the guess work out of servicing.
- Features easy, on board programming.
- Other features include Blocked Vent Input, Alarm Contacts and more!
Mounting Flanges: Available with an adjustable flange for field adaptation to a variety of heating appliances or a factory set welded flange designed for a specific heating appliance.

Air Tubes: Available in 10", 12", 14", 16" and 18" to accommodate heating appliances with varied insertion depths.

Diffuser Plates: Three diffusers are available to accommodate various BTU input ranges:
- "A" Diffuser Plate: 175,000 - 275,000 BTUH
- "B" Diffuser Plate: 50,000 - 175,000 BTUH
- 9-Slot Diffuser Plate: 70,000 - 230,000 BTUH

Air Bands: Two air bands are available to accommodate various BTU input ranges:
- 1-Slot: 50,000 - 175,000 BTUH
- 2-Slot: 175,000 - 275,000 BTUH

Orifice: Appliance Specific Burners include a factory-drilled orifice ready for installation. Multi-Fit and Universal Burners include a Field-Drilled orifice. This orifice must be drilled in the field to suit the firing rate of the appliance.

EZGas Pro Full Firing Rate Kit
50808KITS Full Firing Rate Kit
This kit is designed to change the firing rate of any EZGas Pro burner to accommodate the heating appliance. The kit includes:
- (1) A Diffuser Plate
- (1) 1-Slot Air Band
- (1) B Diffuser Plate
- (1) 2-Slot Air Band
- (1) 9-Slot Diffuser Plate
- (1) Field Drilled Orifice

Retrofit Cover Kit
For field installation on Carlin EZGas Pro.
- Looks Great
- Low Cost
- Easy to Install

Burner Cover Kit
RESCVR5S Cover Kit for EZGas Pro
Includes cover, backplate, mounting hardware, gas valve harness, 8" field drilled orifice nipple

Outside Air/Direct Vent Kit
50433KIT OA/DV Kit for use on RESCVR5S
Includes filler section for backplate with mounting bolts, 4" air inlet with mounting screws, insert for oil line opening, 1 5/8" grommet for BX cable, push plugs

Carlin’s Burner Set-Up Tables (Part No. MN97923) provides information on tube length, diffuser plate, air band, and orifice drilling size for a wide variety of heating appliances.
**Gas Service Kit Tote**

All you’ll need to service Carlin gas burners in one kit

<table>
<thead>
<tr>
<th>GPROTOTES</th>
<th>Service Kit Tote for EZGas Pro</th>
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<tbody>
<tr>
<td></td>
<td>Includes</td>
</tr>
<tr>
<td></td>
<td>• EZGas Pro Instruction Manual</td>
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<tr>
<td></td>
<td>• 14” Flame Rod Wire</td>
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<tr>
<td></td>
<td>• 60200FR Control</td>
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<tr>
<td></td>
<td>• 10” Spark Electrode</td>
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<td></td>
<td>• 12” Spark Electrode</td>
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<td>• 14” Spark Electrode</td>
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<td></td>
<td>• Flame Signal Test Jack</td>
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<td></td>
<td>• Ignitor Spark Tester</td>
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<td></td>
<td>• 1-slot Air Band</td>
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<td></td>
<td>• 2-slot Air Band</td>
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<td></td>
<td>• Ignitor</td>
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<tr>
<td></td>
<td>• 10” Flame Rod</td>
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<td></td>
<td>• 12” Flame Rod</td>
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<tr>
<td></td>
<td>• 14” Flame Rod</td>
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<td></td>
<td>• Air Flow Switch</td>
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<td>• Gas Valve</td>
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<td></td>
<td>• Orifice Nipple</td>
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<tr>
<td></td>
<td>• “A” Diffuser Plate</td>
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<tr>
<td></td>
<td>• “B” Diffuser Plate</td>
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<td></td>
<td>• 9-slot Diffuser Plate</td>
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<td>• 24V Transformer</td>
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**EZGas Pro Dimensions**

1. Carlin 60200FR microprocessor control
2. Air tube
3. Flange (selected to meet appliance requirements)
4. Carlin 41800 solid state ignitor

**EZGas Pro Specifications**

**Input** 50,000 to 275,000 BTUH

**Fuels** Natural gas or propane gas
- Maximum supply pressure........ 14 inches w.c.
- Minimum supply pressure ....... 5.0 inches w.c.
- Manifold pressure................ 3.5 inches w.c.

**Electrical**
- Power.......................... 120 VAC/60 Hz/1-phase
- Limit circuit input............. 120 VAC/60 Hz
- Motor......................... 1/15 HP, 3450 RPM
- Current....................... Approximately 2.0 Amps
- Fuel valve power............... 24 VAC

**Ignition**
- Carlin Model 4180 solid state electronic ignitor
- Ignition voltage............... 9,000 Volts

**Control**
- Carlin Model 60200FR microprocessor control
  - 4 or 6-sec. Trial for ignition (TFI)
  - 1.3-sec. FFRT
  - Adjustable pre-purge and post-purge
  - Serviceman reset protection (Latch-up after three consecutive lockouts)
  - Interrupted duty ignition
  - Recycle on flame failure

**Agencies**
- UL Listed (United States) ........ per ANSI Z21.17
- MEA approval....................... #137-05-E

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**IMPORTANT**
The Carlin EZGas Pro burner should be installed or serviced only by licensed and trained professionals. Contact Carlin for training opportunities in your area.