



RV Emerald Plus™ 4000 GenSet



RV GenSet

- Capped Voltage Regulator for Stability as Appliance Load Changes
- Electronic Ignition for Reduced Maintenance and Dependable Cold Weather Starting
- Gasoline or LP Fueled
- 3-Year Limited Warranty

Ratings and Models

| Model | Fuel | Hz | RPM | Watts | Voltage | Amps | Ph | Circuit Breaker |
|---------------------------------------|-----------|----|------|-------|---------|-----------|----|-----------------|
| <u>Conventional Compartment Model</u> | | | | | | | | |
| 4BGE-FA/26100 | Gasoline | 60 | 1800 | 4000 | 120 | 33.3 | 1 | (1) 30A |
| 4BGE-FA/26110 | LP Liquid | 60 | 1800 | 4000 | 120 | 33.3 | 1 | (1) 30A |
| 4BGE-FN/29236 | Gasoline | 50 | 1500 | 4000 | 120/240 | 33.3/16.7 | 1 | (2) 17.5A |
| 3.5BGE-FN/31813 | LP Liquid | 50 | 1500 | 3500 | 120/240 | 29.2/14.6 | 1 | (2) 15A |
| 4BGE-FA/11500 | LP Vapor | 60 | 1800 | 4000 | 120 | 33.3 | 1 | (1) 30A |

Weight, Size and Sound Level

- 216 lb
- Length: 25 in; Width: 18.8 in; Height: 14 in (see installed dimensions inside)
- 74.5 dB(A) at 10 ft, 61 dB(A) at 50 ft before installation

Lower than National Park Service sound level requirements (60 dB(A) at 50 ft). Can be used in National Parks.
*Typical installation will further reduce sound level.

Standard Features

- Vacu-Flo cooling system plus Thru Flow generator
- 3-point focalized mounting system with vibration isolators
- Drip controlling sheet steel base
- Shielded exhaust header
- 2-stage air cleaner with replaceable dry element
- Connector for remote start/stop
- Automotive type starter with automatic start disconnect circuit
- Fuel filter
- Electronic ignition
- Capped voltage regulator
- Mechanical governor adjustable from service side
- Automatic choke with vacuum pull off
- Electronic fuel pump (gasoline), electric solenoid (LPG)
- Positive fuel safety shutoff (3 psi)
- Spin-on, full-flow lube oil filter
- Low oil pressure shutdown
- 50-inch (1.3 m) generator output leads
- USDA Forest Service-approved spark arrestor muffler (available as an accessories)

Engine Detail

Model: Onan Performer™ P218 gasoline engine
Design: 4-cycle, L-head, two cylinders horizontally opposed
Compression Ratio: 6.9 to 1.0
Displacement: 47.7 in³ (782 cm³)
Maximum Power at 60 Hz:
 - BGE: (Gasoline): 10.3 bhp (7.7 kW)
 - BGE: (LPG): 8.5 bhp (6.3 kW)
Maximum Power at 50 Hz:
 - BGE: (Gasoline): 8.3 bhp (6.2 kW)
 - Cooling: Vacu-Flo®
Cooling Air Volume (includes generator cooling air for the Thru-Flow cooling system)
 - 60 Hz: 480 ft³/min (13.4 m³/min)
 - 50 Hz: 400 ft³/min (11.3 m³/min)
Fuel System: Combustion Air Volume
 - 60 Hz: 20 ft³/min (0.6 m³/min)
 - 50 Hz: 17 ft³/min (0.5 m³/min)
 - BGE: (Gasoline:) Sidedraft carburetor
 - Electronic Fuel Pump with positive fuel shutoff (3 psi), fuel lift 3 ft (914 mm)
 - Replaceable dry element air cleaner
 - Automatic choke with vacuum pull-off

BGE: (LPG) Onan patented LP vaporizer with demand regulator
 - Replaceable dry element air cleaner
Ignition System: Electronic 12 V battery ignition with resistor plugs
Starting System: Remote, 12 V, 3-wire negative ground
 - Automotive type starter with environmentally protected pinion
 - Automatic start disconnect
 - Connector for remote start cable
 - Start-stop rocker switch on control
Lubrication: Full -pressure system
 - Positive displacement lube oil pump
Oil Capacity: 3.5 qt (3.8 L) including filter
 - Spin-on, full-flow oil filter
 - Low oil pressure shutdown dipstick
Cylinder-Crankcase: Alloy aluminum with iron cylinder liners cast into the block
 - Aluminum oil base
Cylinder Head: Alloy aluminum
Valves: Austenitic steel alloy exhaust valves
 - Valve seats: Replaceable intake and exhaust valve seats
 - Valve rotators: Positive rotators on exhaust valves

Average Fuel Consumption:

| | <u>No Load</u> | <u>Half Load</u> | <u>Full Load</u> |
|----------------------|----------------|------------------|------------------|
| | gph/(l/h) | gph/(l/h) | gph/(l/h) |
| 60 Hz BGE (Gasoline) | 0.4 (1.6) | 0.6 (2.5) | 0.8 (3.0) |
| 60 Hz BGE (LPG) | 0.5 (1.9) | 0.8 (3.0) | 1.3 (4.9) |
| 50 Hz BGE (Gasoline) | 0.3 (1.1) | 0.5 (2.0) | 0.7 (2.8) |

Generator Detail

Design: Onan, 4-pole self-excited revolving field. Permanently aligned to engine by a tapered shaft. Drip-proof construction
Insulation system and temperature rise: Meets ANSI/RVIA-EGS-1, BS-4999, and CSA 946 standards
Cooling: Direct drive centrifugal blower
Air Required: (included in engine cooling air volume)
 - 60-Hz: 90 ft³/min (2.5 m³/min)
 - 50-Hz: 75 ft³/min (2.1 m³/min)

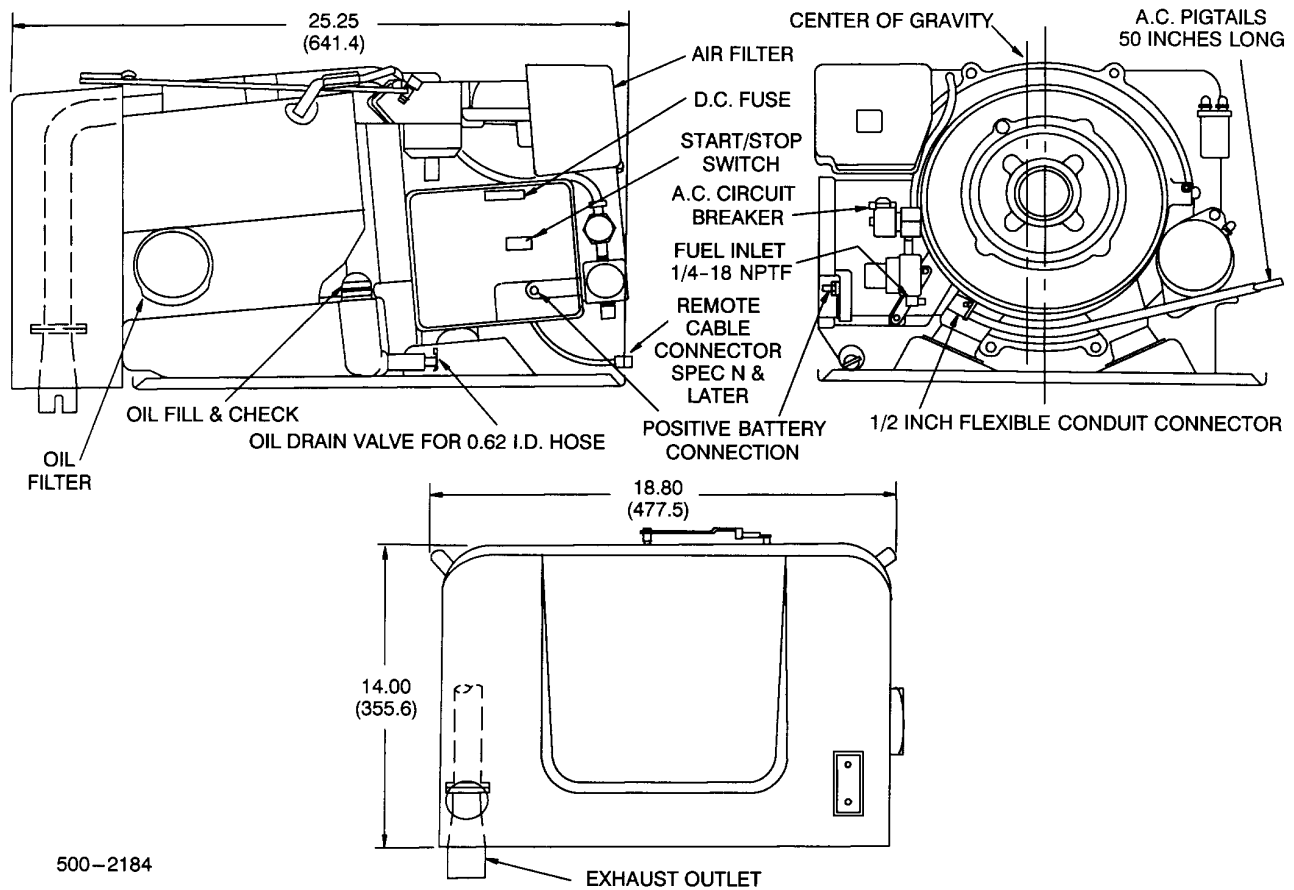
Cast aluminum housing for excellent heat transfer
Exciter: Electronic voltage regulator
Rotor: Laminated electrical steel assembly press-fitted to shaft, balanced
 - Heavy insulated copper wire windings
 - Amortisseur windings for improved waveform and motor starting
Stator: Laminated electrical steel assembly skewed for improved waveform.
 - Heavy insulated copper wire windings
DC Brushes: Electrographic; long life, easily serviced
Bearing: Double-sealed, prelubricated ball bearing

GenSet Performance

Air Conditioner Starting: (60 Hz) One 13,500 Btu air conditioner with 2,000 W baseload or two 11,000 Btu air conditioners with 1500 W baseload at 100°F (38°C) at 500 ft (152 m) elevation.

Frequency and Voltage Regulation: Better than requirements of ANSI/EGS-1.

Basic Dimensions



Approximate Dimensions

Length: 25 in (635 mm)

Width: 18.8 in (478 mm)

Height: 14.0 in (356 mm)

Weight: 216 lb (98 kg)

CAUTION: Drawings are supplied for reference only and should not be used for installation. See Installation Manual for details.

Options and Accessories

- Remote start/stop rocker switch (P/N 300-4936)
- Remote control with start/stop switch and running time meter (P/N 300-4937)
- Remote control with start/stop switch and DC voltmeter (P/N 300-4938)
- Battery, 12 V, 360 cold cranking amps at 0° F (-18°C)
- Housing kit (P/N405-4768) for underfloor installation
- Exhaust resonator (P/N 155-2449)
- Under set mounted exhaust, accessory kit (P/N 542-0471), left side outlet
- Under set mounted exhaust, accessory kit (P/N 542-0486), left side outlet with 2-inch extended tube and spacer
- Under set mounted exhaust, accessory kit (P/N 542-0472), right side outlet
- Under set mounted exhaust, accessory kit (P/N 542-0484), right side outlet with 2-in extended tube and spacer
- Set mounted exhaust, accessory kit (P/N 542-0482), rear outlet
- Set mounted exhaust, accessory kit (P/N 542-0469), front outlet
- Set mounted exhaust, accessory kit (P/N 542-0470), side outlet

Onan Testing for RV Application

Tested at extremes of temperature -20° F (-29° C) to 120° F (49° C) for starting and operation.
Tested with RV loads, air conditioners, microwaves, converter, TVs, VCRs.
Tested installed. Onan owns RVs used for product development testing.
Tested in high humidity conditions.
Tested in salt spray conditions.
Tested in heavy airborne dust conditions.
Field Test program.
60 Hz (120V only) models listed by SGS United States Testing Company, Inc. per ANSI/EGS-1-1998 and CSA-certified per Electrical Bulletin 946.
Ratings apply to altitudes up to 500 ft (150 m), 85° F (29° C) ambient with muffler, in RV enclosure.
60 Hz models meet U.S. EPA Phase I and 1995-2001 California emission regulations for small off-road engines.



Warranty Policy

The ONAN Limited Warranty covers virtually everything except routine maintenance for the first two years you own your RV generator set, and covers parts and labor on major power train and generator set parts during the third year. In addition, it also includes a free 90-day adjustment policy, which provides that Onan will make minor adjustments to your new genset during the first three months you own it - free of charge! Please note: The Onan 3-year Limited Warranty applies to RV generators used in RV applications only, and does not apply to RV generators used in commercial mobile applications.

For complete Onan Limited Warranty details see your Onan Distributor or Certified Onan Service Dealer.

After Sale Support

GENUINE ONAN MAINTENANCE CARE PARTS AND PRODUCTS

For your ongoing satisfaction and the dependability of your Onan RV genset, Onan offers a complete line of replacement and tune-up parts, oil and maintenance chemicals specifically designed for RV gensets. Easy to find at certified Onan RV Service and Parts Dealers coast-to-coast, Onan Green Label™ RV parts are packaged for correct selection and convenient on-board storage.

EASY TO LOCATE CERTIFIED ONAN RV SERVICE AND PARTS DEALERS

Onan has trained, tested and certified over 1,000 Onan RV Service Dealers covering most major metropolitan areas in the U.S. and Canada. To easily locate the certified Onan Service Dealer, no matter where you travel, call 1-800-888-ONAN and ask us to send you an RV Service and Parts Dealer Directory (F-919).



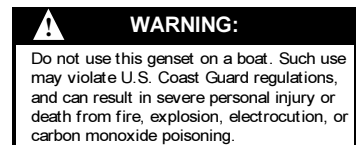
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WARNING: Backfeed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.