



## INSTALLATION

### Lifting the Generator

Proper tools, equipment, and qualified personnel must be used in all phases of handling and moving the generator. The approximate weight of the generator appears in the Generator Specifications section.

Use the lifting holes (A) in the base of the generator to lift the generator onto the concrete pad. Lift the generator in accordance with the Occupational Safety and Health Administration (OSHA) or local lifting regulations. Retouch any chipped paint with the supplied touch-up paint.

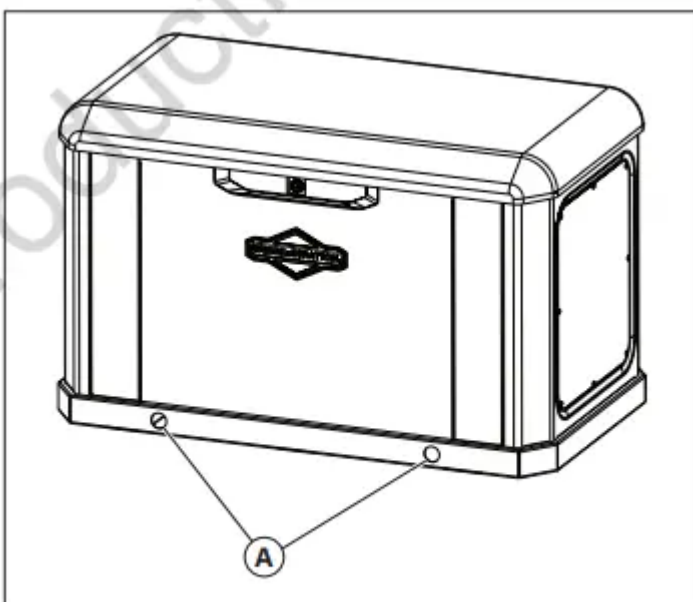


Figure 4

## Cold Weather Kit

If the generator operates in temperatures below 30° F (-1° C), Briggs & Stratton highly recommends that the installer install a cold weather kit.

Oil Sump Warmer Kit, Part Number 6840-00, includes:

- Oil sump warmer
- Install brackets
- Hardware
- Harness

Fuel Regulator Warmer Kit, Part Number 6845-00, includes:

- Regulator warmer
- Deflector bracket
- Harness

Battery Warmer Kit, Part Number 6869-00, includes:

- Battery warmer
- Harness

Find these items at the local service dealer.

For more information, please call 800-732-2989 between 8:00 a.m. and 5:00 p.m. CT.

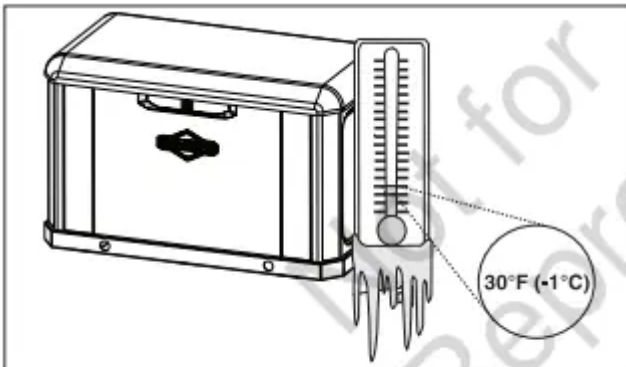


Figure 5

## Anchoring and Wind Rating

### Concrete Anchoring of Unit to Poured or Existing Slab

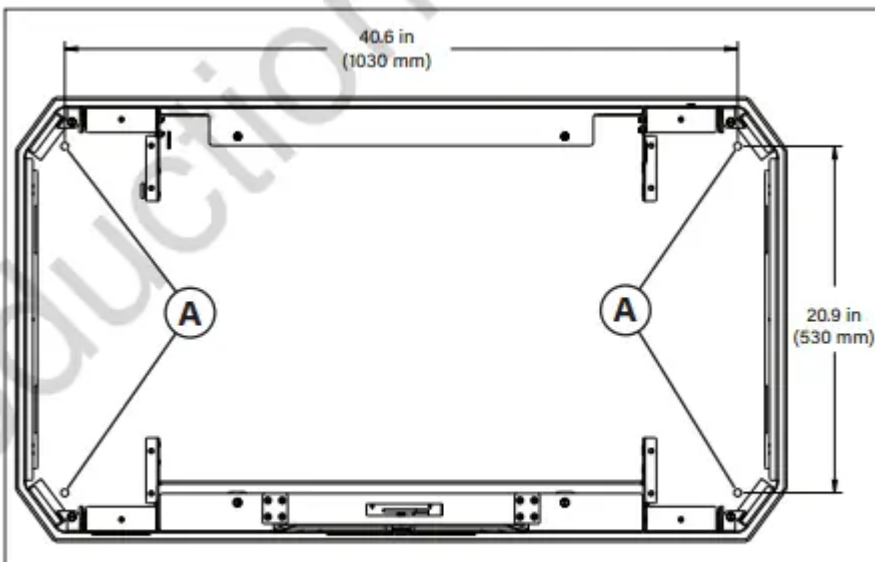
To achieve the listed wind rating, the generator must be installed in strict compliance with this Installation and Operation Manual. The product components must be of the material specified and all screws must be installed in accordance with the applicable provisions and the anchor manufacturer's published installation instructions.

The concrete slab or pad must meet the requirements below and the generator must be anchored with one of the following anchor types.

### Anchor Types

1. Quantity (4) 3/8-inch dia. ITW Red Head Large Diameter Tapcon (LTD) with 1-1/2-inch embedment, 2-inch min. edge of concrete, and 6-inch min. spacing from neighboring concrete anchors typ. If anchor does not provide a .812-inch min. OD integrated washer out-of-box, employ (1) .812-inch min. OD washer per anchor.
2. Quantity (4) 3/8-inch dia. DeWalt Screw-Bolt+ with 1-1/2-inch embedment, 4-inch min. edge of concrete, and 6-inch min. spacing from neighboring concrete anchors typ. If anchor does not provide a .812-inch min. OD integrated washer out-of-box, employ (1) .812-inch min. OD washer per anchor.
3. Quantity (4) 3/8-inch-16 SAE Gr. 2 min. or SS bolt with .812-inch min. OD washer, typ. Ensure 1/2-inch min. thread engagement U.N.O. by bolt and/or insert manufacturer, typ.

There are four 7/16-inch hole locations (A) in the base of the generator in which to anchor the unit.



**Figure 6**

## Concrete Slab/Pad Types

WIND RATING MPH	ANCHOR TYPE	PAD MODEL	PAD DIMENSIONS			CONCRETE SPEC
			WIDTH	LENGTH	THICKNESS	
Up to 186 (at grade)	3	Pre-cast (contact dealer)	37 in (940 mm)	55 in (1397 mm)	4 in (102 mm)	3000 psi (20.70 MPa)
Up to 186 (at grade)	1 or 2	Poured	37 in (940 mm)	55 in (1397 mm)	4 in (102 mm)	3000 psi (20.70 MPa)

Find these items at the local service dealer.

### Note

Unless mandated by local or state codes, or required to achieve wind rating, a concrete slab or pad is not required.

## Electrical and Fuel Inlet Locations

The 3/4-inch N.P.T. fuel inlet connector (A) and electrical inlet locations (B) are shown in Figure 7.

A 1.73 inch (44 mm) knock-out hole is provided for the electrical inlet. Make sure that the installed conduit(s) enter the unit in zone (C) as shown in the drawing below so that they properly enter the electrical box and do not interfere with the fully opened roof.

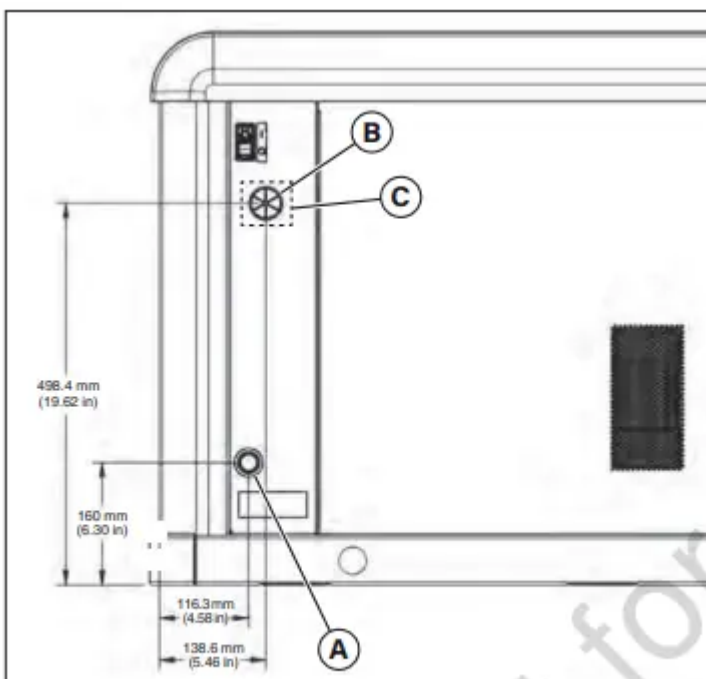


Figure 7

## Access Panels

The generator enclosure has several access panels, as shown.

The access panels and the components located behind them are listed below:

- (A) Roof (Controller, air filter, oil dipstick, and circuit breaker)
- (B) Front Access Panel (oil drain, oil filter, battery)
- (C) End Cap, Controller End (control box wiring cover, fuel regulator, fuel selector, generator data label)
- (D) End Cap, Exhaust End (alternator fan)
- (E) Rear Access Panel (engine starter, starter relay)
- (F) Control Box Wiring Cover (field wiring, control wiring)

Each generator ships with a set of identical keys fastened to the fuel solenoid.

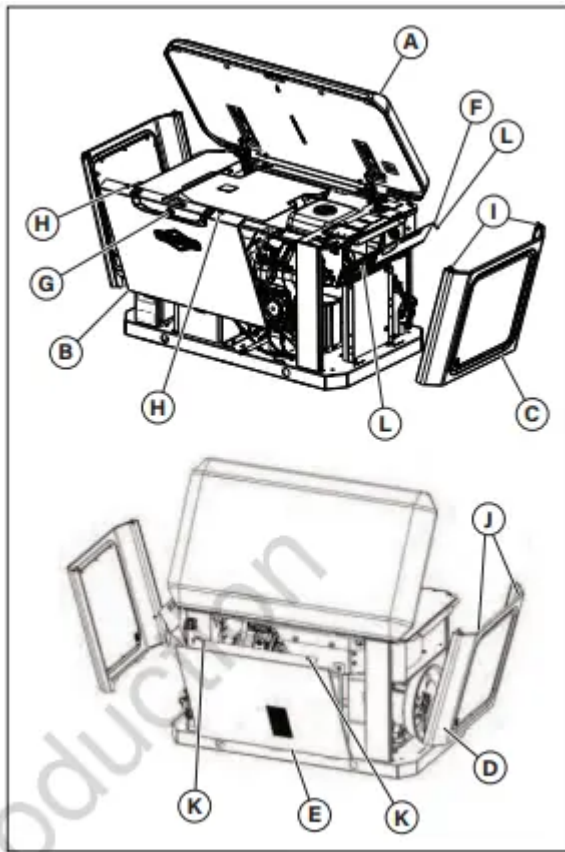


Figure 8

### Opening the roof (A):

1. Insert the key into the lock (G) of the front panel (B). Gently push down on the roof above the lock to assist in turning the key. Turn the key one quarter turn clockwise.
2. Lift the roof (A) to the OPEN position.

**Removing the front panel (B):**

1. Loosen two self-retaining fasteners (H) that secure the panel to the unit.
2. Lift the panel to remove it from the unit.

**Attaching the front panel (B):**

1. Place the panel into the unit, aligning the tabs on the panel into the slots on the base.
2. Tighten the two self-retaining fasteners (H) that secure the panel to the unit.

**Removing the end cap, controller end (C):**

1. Loosen two self-retaining fasteners (I) that secure the end cap to the unit.
2. Lift the end cap to remove it from the unit.

**Attaching the end cap (C):**

1. Place the end cap into the unit, aligning the tabs on the end cap into the slots on the base.
2. Tighten the two self-retaining fasteners (I) that secure the panel to the unit.

**Removing the end cap, exhaust end (D):**

1. Loosen two self-retaining fasteners (J) that secure the end cap to the unit.
2. Lift the end cap to remove it from the unit.

**Attaching the end cap, exhaust end (D):**

1. Place the end cap into the unit, aligning the tabs on the end cap into the slots on the base.
2. Tighten the two self-retaining fasteners (J) that secure the panel to the unit.

**Removing the rear panel (E):**

1. Using a Phillips head screw driver, loosen two selfretaining fasteners (K) that secure the panel to the unit.
2. Using a standard blade screw driver, gently lift the rear panel lip off of the back rail.
3. Tip the rear panel back under the roof (A).
4. Move to the back of the unit and lift the rear panel off.

**Attaching the rear panel (E):**

1. Move to back of unit and place rear panel into the unit, aligning the tabs on the panel into the slots on the base.
2. Tip the rear panel forward under the roof (A).
3. From the front or side of the unit, align the fasteners (K) and tighten with a Phillips head screw driver.

### **Removing the control box wiring cover (F):**

1. Remove two fasteners (L) that secure the control box wiring cover to the control box.
2. Tip the control box wiring cover down to access field and control wiring.

### **Attaching the control box wiring cover (F):**

1. Tip the control box wiring cover up.
2. Attach the control box wiring cover with the two fasteners (L).

## **Fuel Installation Plan**

**WARNING** Propane and natural gas are extremely flammable and explosive, which could cause burns, fire, or explosion, resulting in death or serious injury.

- A licensed professional must perform the installation.
- Install the fuel supply system according to NFPA 37 and other applicable fuel-gas codes.
- Before placing the generator into service, properly purge and leak-test the fuel system lines.
- NO leakage is permitted.
- DO NOT operate the engine if you smell fuel.

### **NOTE**

DO NOT install the supplied flexible fuel line underground or in contact with the ground.

- Keep the entire flexible fuel line visible for periodic inspection. Do not conceal it or run it within any wall, floor, or partition. Never let the line contact these structures.

The following information addresses the planning phase of installations for technicians specializing in gaseous fuel systems. Always obey the local applicable fuel-gas codes affecting the installation site. Consult your local fuel supplier or fire marshal with any questions or problems.

**TO THE INSTALLER:** Consult with the generator owner(s) and address any technical considerations affecting their installation plans before applying these guidelines.

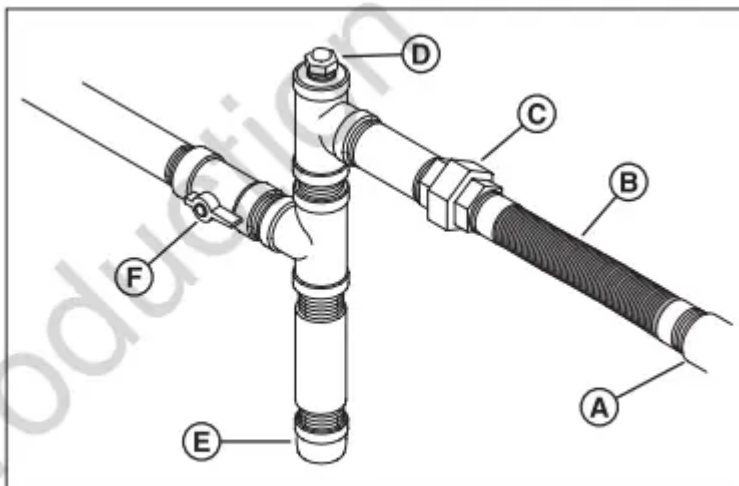
The following general rules apply to piping on gaseous fuel systems:

- The piping material must follow federal and local codes, with rigid mounting and protection against vibration.
- Protect piping from physical damage, especially where it passes through flower and shrub beds and other cultivated areas where damage can occur.
- Install the provided flexible fuel line (B) between the generator fuel inlet port (A) and the rigid piping to prevent excessive stress on the piping material due to thermal expansion and contraction.
- Provide a union (C) or flanged connection downstream to allow for future removal.

- Install a manometer test port (D) for vapor fuels. Use the port to install a manometer and check if the engine receives the proper fuel pressure adequate for operation. See the service center for a digital or analog manometer designed for vapor fuels only (part number 19495). After completing the initial test runs, remove the manometer and plug the port.
- For vapor fuels only: Protect piping from freezing in areas that are prone to the formation of hydrates or ice. When terminating hard piping, use a sediment trap (E) where condensate liquid cannot likely freeze.
- Install a minimum of one accessible, approved manual shut-off valve (F) in the fuel supply line within 6 ft (1.8 m) of the generator.
- Install a manual shut-off valve in the interior of the building.
- Increase strength and flexibility of the piping supports and connections in areas prone to earthquakes, tornados, flood hazards, and unstable ground.
- Ensure that the size of the piping is adequate enough to maintain the required supply pressures and volume flow under varying generator load conditions, with all gas appliances connected to the fuel system turned on and operating.
- Use a pipe sealant or joint compound approved for use with natural gas/liquefied petroleum on all threaded fittings to reduce the possibility of leakage.

**NOTE** Keep thread sealant out of the gas piping to prevent damage to component parts.

- Properly purge and leak-test piping according to applicable codes and standards.



**Figure 9**

- (A) Generator Fuel Inlet
- (B) Flexible Fuel Line
- (C) Union Fitting
- (D) Manometer Test Port

(E) Sediment Trap

(F) Manual Shut-off Valve

## Fuel Consumption

The following chart shows estimated fuel supply requirements at half and full load for natural gas and liquefied petroleum vapor fuels.

### NG Fuel

		<b>17 kW</b>	<b>20 kW</b>	<b>26 kW</b>
<b>1/2 Load</b>	BTU/hr	170,000	187,000	206,000
	ft3/hr	170	187	206
<b>Full Load</b>	BTU/hr	248,000	260,000	323,000
	ft3/hr	248	260	323

### LP Fuel

		<b>17 kW</b>	<b>20 kW</b>	<b>26 kW</b>
<b>1/2 Load</b>	BTU/hr	185,000	208,000	235,000
	ft3/hr	74	83	94
	gal/hr	2.10	2.30	2.60
<b>Full Load</b>	BTU/hr	295,000	338,000	427,000
	ft3/hr	118	135	171
	gal/hr	3.30	3.70	4.70

<b>Physical Properties</b>	<b>LP Vapor</b>	<b>Natural Gas</b>
Normal Atmospheric State	Gas	Gas
Boiling Point (°F)	-44	-259
Heating Value:		
BTU per gallon (Net LHV*)	83,340	63,310
BTU per gallon (gross**)	91,547	
BTU per cubic feet (gas)	2,500	1,000
Density***	36.39	57.75
Weight†	4.24	2.65

\* LHV (Low Heat Value) is the more realistic rating.

\*\* Gross heat value does not consider heat lost in the form of water during combustion.

\*\*\* Density is given in "Cubic Feet of Gas per Gallon of Liquid."

† Weight is given in "Pounds per Gallon of Liquid."

## Fuel Type

Consider the type of fuel that your generator uses, as it affects the entire installation process. The system was factory tested and adjusted using natural gas, but it can be converted to use liquefied petroleum vapor. For correct engine function, consider factors that affect each of these fuels, such as the location and the duration of possible utility interruptions. Follow these guidelines when choosing fuel type:

- Use clean, dry fuel that is free of moisture or any particulate material. Using fuels outside the recommended values can cause performance problems.
- In engines set up to run on propane (liquefied petroleum), only use commercial-grade HD-5 propane.

Natural gas or LP engines are certified to operate on natural or liquid propane gas. The emissions control system for this engine is EM (Engine Modifications).

## Fuel Pressure

Both LP vapor and natural gas fuel supply pressure at the generator's fuel inlet port must be a minimum value at full load with all gas appliances turned on and in operation.

Natural Gas must be 3.5-7 inches Water Column (WC).

Liquefied Petroleum must be 11-14 inches WC.

Ensure that all gas line shut-off valves are OPEN and that adequate fuel pressure is available whenever automatic operation is needed.

## OPERATION

### Controls

**WARNING** Failure to read and obey the operator's manual, all warnings, and operating instructions could result in death or serious injury.

### Front View

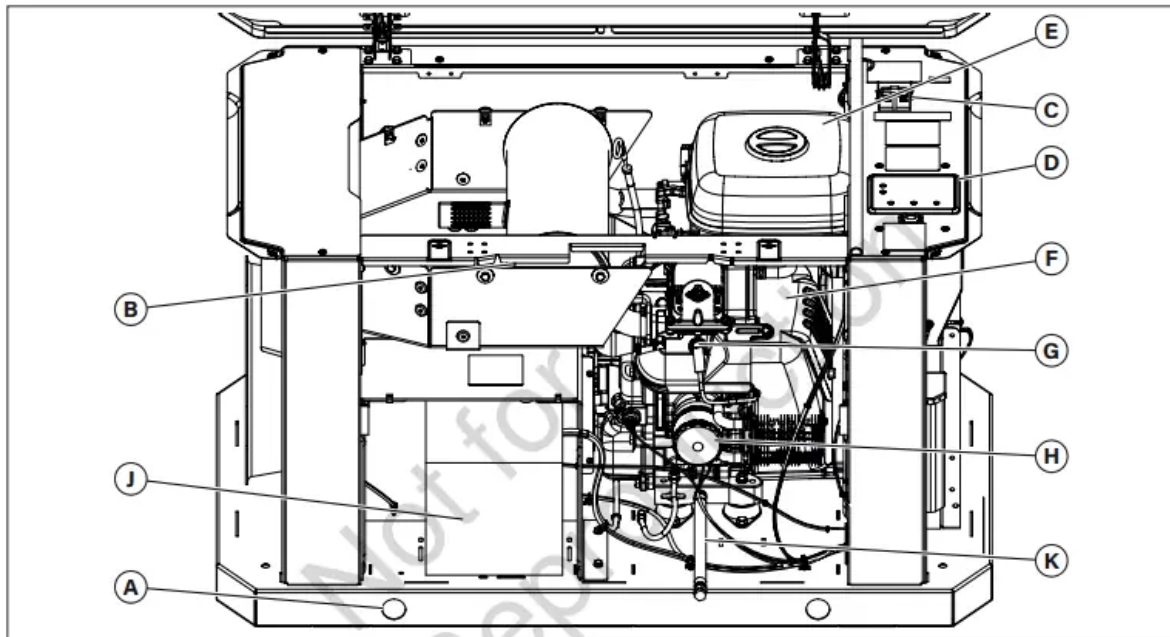


Figure 18

for clarity. Legend for System Connector Locations:

- (A) Lifting Holes — Provided at each corner for lifting generator
- (B) Muffler — High-performance muffler lowers engine noise to comply with most residential codes
- (C) Circuit Breaker — Protects the system from shorts and other over-current conditions
- (D) Controller — Facilitates for generator operation control, menu start-up, and informational display functions
- (E) Air Cleaner — Uses a dry-type filter element to protect engine by filtering dust and debris out of intake air
- (F) Engine Label — Identifies engine model and type (located on the valve cover)
- (G) Spark Plug — A device in the cylinder head of the engine that ignites the fuel mixture by means of an electric spark
- (H) Oil Filter — Filters engine oil to prolong generator life
- (J) Battery (installer supplied) — 12VDC, lead acid, automotive-style battery provides power to start the engine
- (K) Oil Drain Hose — Facilitates oil changing

**Back View**

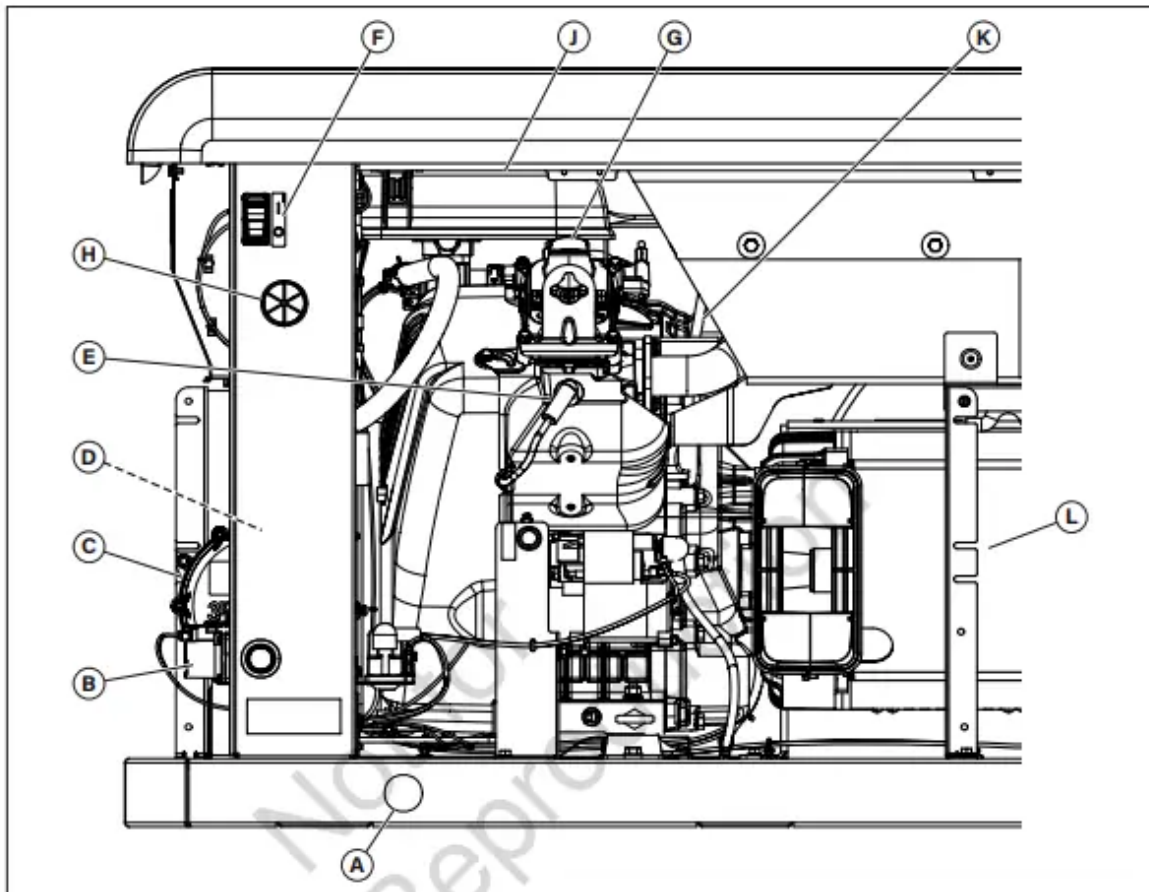
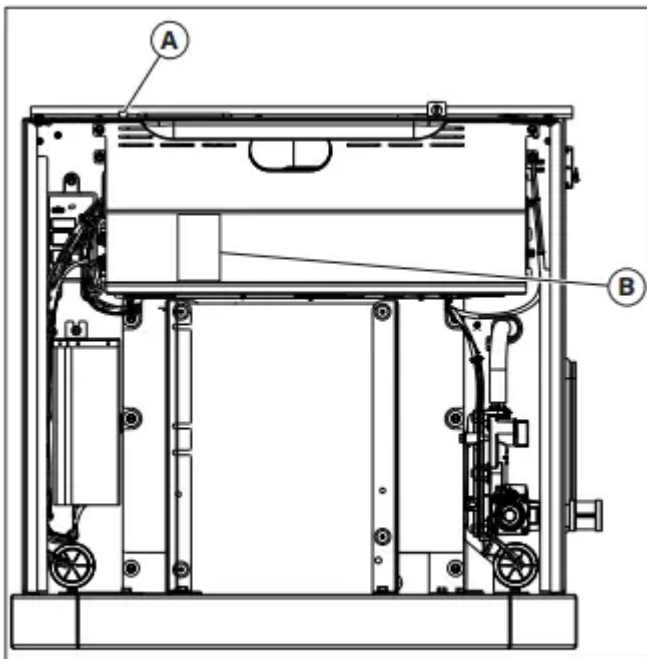


Figure 19

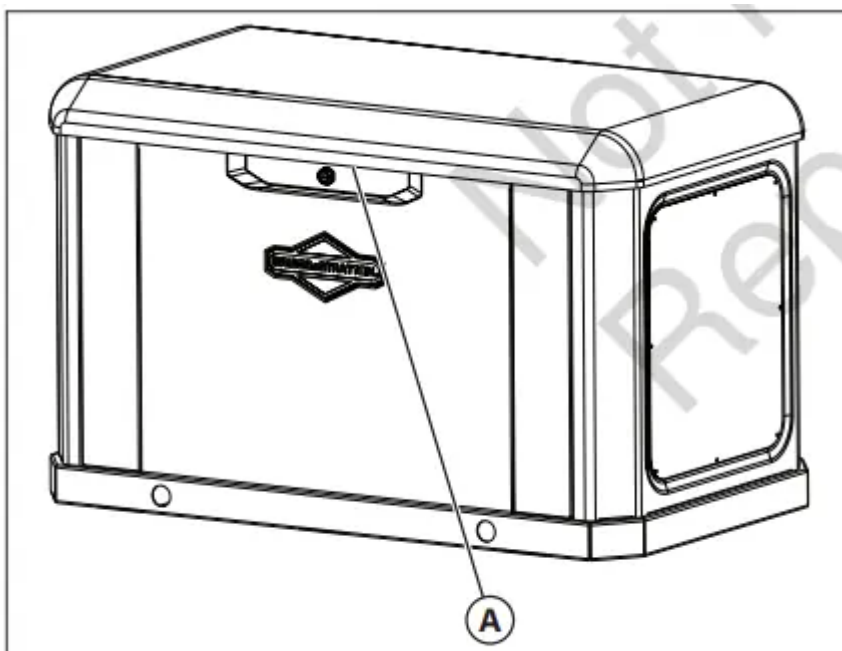
- (A) Lifting Holes — Provided at each corner for lifting generator
- (B) Fuel Solenoid — Automatically opens and closes to supply fuel to the unit when needed
- (C) Fuel Regulator — Controls fuel flow to the engine for proper operation
- (D) Fuel Selector Valve (not shown) — Aids in selecting the proper fuel type (LP or NG)
- (E) Spark Plug — A device in the cylinder head of the engine that ignites the fuel mixture by means of an electric spark
- (F) ON/OFF Switch — Aids in turning the generator on (I) and off (O)
- (G) Oil Fill Cap — The location for adding oil to the engine
- (H) Electrical Field Wiring Inlet — Wires to and from the generator are centered in this location
- (J) Air Cleaner — Uses a dry-type filter element to protect the engine by filtering dust and debris out of the intake air
- (K) Engine Oil Dipstick — Allows the user to check the engine oil level easily
- (L) Alternator — An electrical machine that generates an alternating current



**Figure 20**

(A) Fuse Holder — For the 15-amp ATO-type fuse (fuse holder is located below the controller)

(B) Generator Data Label — Identifies the generator model number and serial number. Located inside the battery access compartment



**Figure 21**

(A) Status LED — Three modes:

- Blue solid light: Unit ready for operation (controller in AUTO mode)
- Blue flashing light: Unit fault (review fault message on controller)

- No light: Unit controller in MANUAL mode or no battery power or ON/OFF switch in OFF position

## Important Owner's Considerations

**WARNING** Engine exhaust contains carbon monoxide, a poisonous gas that could kill people and animals in minutes. People and animals cannot smell it, see it, or taste it. Even if you do not smell exhaust fumes, you could still be exposed to carbon monoxide gas.

- Carbon monoxide detector(s) MUST be installed and maintained indoors according to the manufacturer's instructions and recommendations. Smoke alarms cannot detect carbon monoxide gas.
- If you start to feel sick, dizzy, weak, or the carbon monoxide alarm sounds while using this product, get to fresh air right away. Call emergency services. You may have carbon monoxide poisoning.

**WARNING** Propane and natural gas are extremely flammable and explosive, which could cause burns, fire, or explosion, resulting in death or serious injury.

- The generator features an automatic safety gas fuel shut-off valve.
- DO NOT operate the equipment if the fuel shut-off valve is missing or inoperative.

## Engine Oil

The engine ships from the factory pre-run and filled with full synthetic oil (API SJ/CF 5W-30). This step allows for system operation in a wide range of temperature and climate conditions. Before starting the engine, check the oil level as described in the Maintenance section.

**NOTE** Any attempt to crank or start the engine before it has been correctly filled with the recommended oil will result in equipment failure.

- Damage to equipment resulting from failure to obey this instruction will void the engine and generator warranty.

## Battery

The installer must supply a rechargeable 12VDC starting battery. See Battery in the Final Considerations section.

## 15 -Amp Fuse

Ensure that the fuse is correctly installed before operating the generator.

## Automatic Operation Sequence

The generator's controller monitors utility voltage. If the utility voltage drops below a preset level, the controller signals the engine to crank and start. When the utility voltage restores above a

preset voltage level, the engine receives signals to shut down. The actual system operation is not adjustable and undergoes sequencing by sensors and timers on the controller in the following manner:

### **Utility Voltage Dropout Sensor**

- This sensor monitors the utility source voltage.
- If the utility source voltage drops below approximately 70% of the nominal supply voltage, the sensor initiates a timer.
- The engine cranks and starts once the timer has expired.

### **Utility Voltage Pickup Sensor**

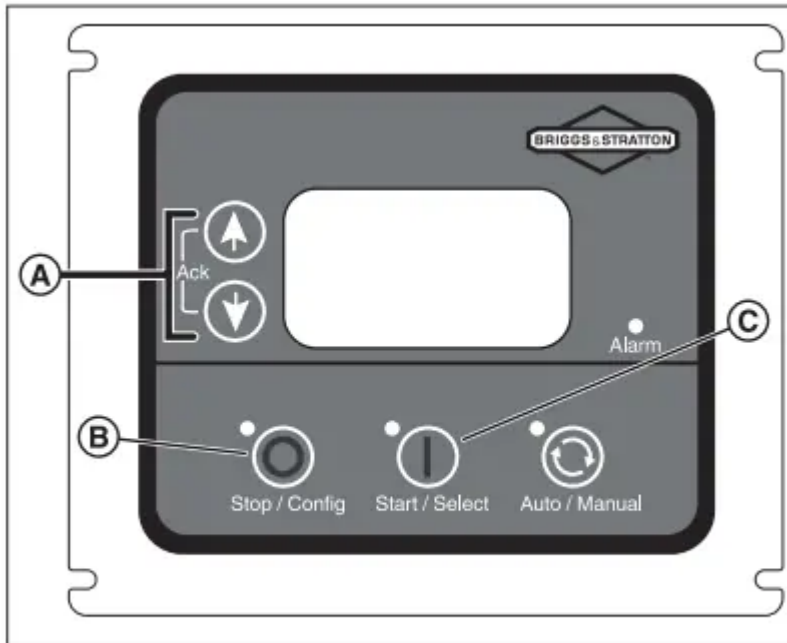
This sensor monitors the utility voltage. When the utility voltage restores above approximately 80% of the nominal source voltage, a shut-down timer initiates and the engine cools down.

### **Engine Cool-down Timer**

When the system senses the utility power, the load transfers to the utility source and the engine enters a five-minute cool-down period.

### **Setting the Exercise Timer**

1. Push and hold the stop/config button (B).
2. Push the start/select button (C) to enter "write" mode.
3. Enter the password (0000) by using the arrow keys (A) and the start/select button (C).
4. In the configuration screen use the arrow keys (A) to find module.
5. Push the start/select button (C) and, using the arrow keys (A), find auto exercise.
6. Push the start/select button (C) and, using the arrow keys (A), select each parameter and choose the desired settings.
7. Push and hold the stop/config button (B) to save your settings.



**Figure 22**

A detailed list of all the on-screen parameters appears in the Configuration of GCU section inside the online Operation Instructions GC1030 SERIES GENSET Controller Manual (part number 80086364).

## MAINTENANCE

### Servicing the System

**WARNING** Generator voltage could cause electrical shock or burns, resulting in death or serious injury.

- DO NOT allow unqualified people to operate or service the generator.

**WARNING** With the battery connected, the generator may crank and start without warning, resulting in death or serious injury.

- Before servicing, stop the generator and disconnect the negative (-) cable at the battery.

Always follow these steps before performing any generator maintenance:

1. Push the ON/OFF switch on the back of the generator to the OFF (0) position.
2. Remove utility power to the generator to de-energize the battery charger.
3. Unlock and open the roof as described in the Access Panels section.
4. Remove the 15-amp fuse from the fuse holder located below the controller.
5. Disconnect the negative (-) cable at the battery.
6. Perform the service steps as specified.

7. Connect the negative (-) cable at the battery.
8. Install the 15-amp fuse into the fuse holder.
9. Close and lock the roof.
10. Restore utility power to the generator.
11. Push the ON/OFF switch on the back of the generator to the ON (I) position.
12. Set the generator mode to auto.

## **Maintenance Schedule**

Follow the hourly or calendar intervals of operation, whichever occurs first.

### **Every 8 Hours of Operation or Daily**

Clean Debris

Check the Engine Oil Level

### **Every 100 Hours of Operation or Annually**

Change the Air Filter

Change the Engine Oil and Filter

Replace the Spark Plugs

Check the Valve Clearance

Check the Circuit Breaker Torques

### **Annually**

Clean the Oil Cooler Fins

Regular maintenance improves the performance and extends the life of the generator. See any authorized dealer for service.

## **Emissions Control**

Any individual, whether from a non-road engine repair establishment or not, can perform maintenance, replacement, or repair of the emissions control devices and systems. However, only a factory-authorized dealer must do the work required to obtain a “no charge” emissions control service. See the Emissions Warranty for details.

## **Maintaining the Generator**

The generator’s warranty does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, the operator must maintain the generator as instructed in this manual.

The generator requires the owner to make some adjustments periodically to correctly maintain it.

Perform all service and adjustments at least once each season. Obey the requirements in the Maintenance Schedule section.

Generator maintenance also means keeping the unit clean. Operate the unit in an environment that remains free of excessive dust, dirt, moisture, or any corrosive vapors. Do not allow the cooling air inlets and outlets on the enclosure to become clogged with snow, leaves, or other foreign material. To prevent generator damage caused by overheating, keep the enclosure cooling inlets and outlets clean and unobstructed at all times.

Check the cleanliness of the unit frequently and clean it when dust, dirt, oil, moisture, or other foreign substances appear on its exterior and interior surface. Inspect the air inlet and outlet openings inside and outside the enclosure to make sure no blockages exist in the airflow.

**NOTE** Improperly treating the generator can damage it and shorten its life.

- DO NOT expose the generator to excessive moisture, dust, dirt, or corrosive vapors.
- DO NOT insert any objects through the cooling slots.

## Cleaning the Generator

**WARNING** Exhaust heat/gases could ignite combustibles, causing a fire and resulting in death or serious injury.

- Keep the area near the generator clean and free of debris.

### **NOTE**

- DO NOT use direct spray from a garden hose to clean the generator. Water can enter the engine and generator and cause damage.
  - Periodically inspect the engine exterior for contamination and potential damage from dirt, leaves, rodents, spiderwebs, insects, etc., and remove these materials.
1. Push the ON/OFF switch on the back of the generator to the OFF (0) position.
  2. Remove utility power to the generator to de-energize the battery charger.
  3. Unlock and open the roof as described in the Access Panels section.
  4. Remove the 15-amp fuse from the fuse holder located below the controller.
  5. Disconnect the negative (-) cable at the battery.
  6. Clean the generator using the following steps:
    - Wipe the exterior surfaces clean with a damp cloth.
    - Use a soft bristle brush and vacuum cleaner to loosen and pick up dirt and debris. Use lowpressure air (not to exceed 25 psi or 175 kPa) to blow away dirt and debris.
    - Clear any snow, leaves, or debris from the air inlets and outlets. Keep these openings unobstructed to prevent generator damage caused by overheating.

7. Connect the negative (-) cable at the battery.
8. Install the 15-amp fuse into the fuse holder.
9. Close and lock the roof.
10. Restore utility power to the generator.
11. Push the ON/OFF switch on the back of the generator to the ON (I) position.
12. Set the generator mode to auto.

## **Maintaining the Engine**

### **Engine Oil**

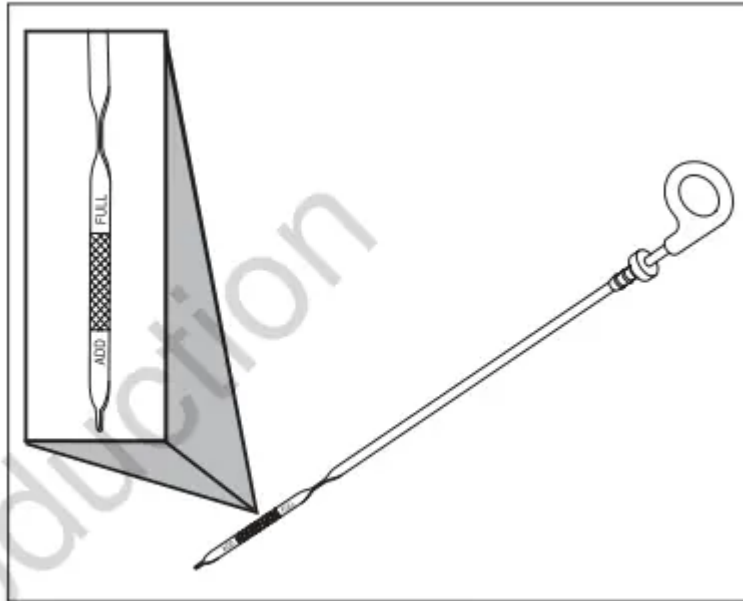
Use only Briggs & Stratton® 80028446 SAE 5W-30 full synthetic engine oil. Other full synthetic high-quality detergent oils are acceptable if classified for service SJ or higher. Do not use special additives.

### **Checking the Engine Oil Level**

Maintain the oil level somewhere between the “add” and the “full” marks on the dipstick. Before checking the oil level, follow these steps to ensure that an accurate reading appears on the dipstick:

1. Push the ON/OFF switch on the back of the generator to the OFF (0) position.
2. Remove utility power to the generator to de-energize the battery charger.
3. Unlock and open the roof as described in the Access Panels section.
4. Remove the 15-amp fuse from the fuse holder located below the controller.
5. Disconnect the negative (-) cable at the battery.
6. Allow approximately five minutes for the oil to drain back into the oil pan.
7. Remove the dipstick. Wipe it with a clean cloth or paper towel. Then, push the dipstick all the way into the dipstick tube.
8. Remove the dipstick and note the amount of oil on it. The oil must reach a level somewhere between the “add” and “full” marks on the dipstick.

9. If the oil level is below the “add” mark on the dipstick, install the dipstick and proceed to



**Figure 23**

step 10.

10. Remove the oil fill cap from the valve cover.
11. Add the required amount of oil to bring the level up to (but not over) the “full” mark on the dipstick. Install the oil fill cap on the valve cover and wipe up any spilled oil.
12. Connect the negative (-) cable at the battery.
13. Install the 15-amp fuse into the fuse holder.
14. Close and lock the roof.
15. Restore utility power to the generator.
16. Push the ON/OFF switch on the back of the generator to the ON (I) position.
17. Set the generator mode to auto.

## **TROUBLESHOOTING**

See the Alarms section of the separate online manual titled Operation Instructions GC1030 SERIES GENSET Controller (part number 80086364) for details on service alarm description and causes.

## Troubleshooting



PROBLEM	CAUSE	CORRECTION
<p>The engine is running, but no AC output is available.</p>	<ol style="list-style-type: none"> <li>1. Open or defective circuit breaker</li> <li>2. An alarm on the generator's controller</li> <li>3. Poor wiring connections or defective transfer switch</li> </ol>	<ol style="list-style-type: none"> <li>1. Reset or replace the circuit breaker.</li> <li>2. See the separate online manual titled Operation Instructions GC1030 SERIES GENSET Controller (part number 80086364) for details. Contact the local service facility.</li> <li>3. Check and repair it or contact the local service facility.</li> </ol>
<p>The engine runs well at no-load but "bogs down" when loads are connected.</p>	<ol style="list-style-type: none"> <li>1. Overloaded generator</li> <li>2. Short circuit in a connected load</li> <li>3. Shorted generator circuit</li> <li>4. Incorrect fuel pressure or mixture</li> <li>5. Kinked fuel line between the regulator and engine</li> <li>6. Clogged air filter</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove one or more loads.</li> <li>2. Disconnect the shorted electrical load.</li> <li>3. Contact the local service facility.</li> <li>4. See The Gaseous Fuel System section.</li> <li>5. Remove the kink. Replace the line if necessary.</li> <li>6. Clean or replace the air filter</li> </ol>
<p>The engine does not start or it starts but runs rough.</p>	<ol style="list-style-type: none"> <li>1. Missing or blown 15-amp fuse</li> <li>2. Blown thermal fuse(s).</li> <li>3. Fuel supply turned off or depleted</li> <li>4. Incorrect fuel selection</li> <li>5. Failed battery</li> </ol>	<ol style="list-style-type: none"> <li>1. Install a new 15-amp fuse. See the System Controller section. Replace the thermal fuse(s).</li> <li>2. Replace the thermal fuse(s). 3. Open the fuel valve(s) and check the propane tank.</li> <li>4. Check the fuel selector switch and set it to the proper setting (if applicable).</li> <li>5. Replace the battery.</li> <li>6. Clean or replace the air filter.</li> <li>7. Check the linkage.</li> </ol>



	<p>6. Clogged air filter</p> <p>7. Throttle linkage binding</p>	
The engine shuts down during operation.	<p>1. Fuel supply turned off or depleted</p> <p>2. Alarm showing on the controller digital display</p>	<p>1. Check the fuel valves and fill the propane tank.</p> <p>2. See the separate online manual titled Operation Instructions GC1030 SERIES GENSET Controller (part number 80086364) for details.</p>
The circuits lose power.	<p>1. An open generator circuit breaker</p> <p>2. Transfer switch problems</p>	<p>1. Reset the circuit breaker.</p> <p>2. See the transfer switch manual.</p>
The unit does not exercise.	<p>1. Controller not set to auto.</p> <p>2. Exercise timer not set or set to OFF.</p> <p>3. Unit date and time not set.</p> <p>4. Failed battery.</p> <p>5. Missing or blown 15-amp fuse.</p>	<p>1. Push the auto button on the controller.</p> <p>2. Set the exercise timer.</p> <p>3. Set the unit date and time.</p> <p>4. Replace the battery.</p> <p>5. Install a new 15-amp fuse. See the System Controller section.</p>
The generator undergoes excessive vibration	<p>. Loose mechanical fastener.</p>	<p>Check and repair it or contact the local service facility.</p>
Utility power returns and the unit does not stop.	<p>1. Blown fuses in the transfer switch.</p> <p>2. The five-minute cooldown still in process.</p>	<p>1. Install new fuses.</p> <p>2. Wait five minutes.</p> <p>3. Check and repair the unit or contact the local service facility.</p>

	3. Poor wire connection or defective controllers.	
Possible issues exist in manual mode.	–	See Table 7 (Common Faults and Their Remedial Actions) inside the separate online manual titled Operation Instructions GC1030 SERIES GENSET Controller (part number 80086364) for details.
Possible issues exist in auto mode.	–	See Table 7 (Common Faults and Their Remedial Actions) inside the separate online manual titled Operation Instructions GC1030 SERIES GENSET Controller (part number 80086364) for details.
Possible issues exist with Electronic Governing.	–	See Table 7 (Common Faults and Their Remedial Actions) inside the separate online manual titled Operation Instructions GC1030 SERIES GENSET Controller (part number 80086364) for details.

Call 800-732-2989 or visit [www.briggsandstratton.com](http://www.briggsandstratton.com) for assistance.

**Warning**

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.

