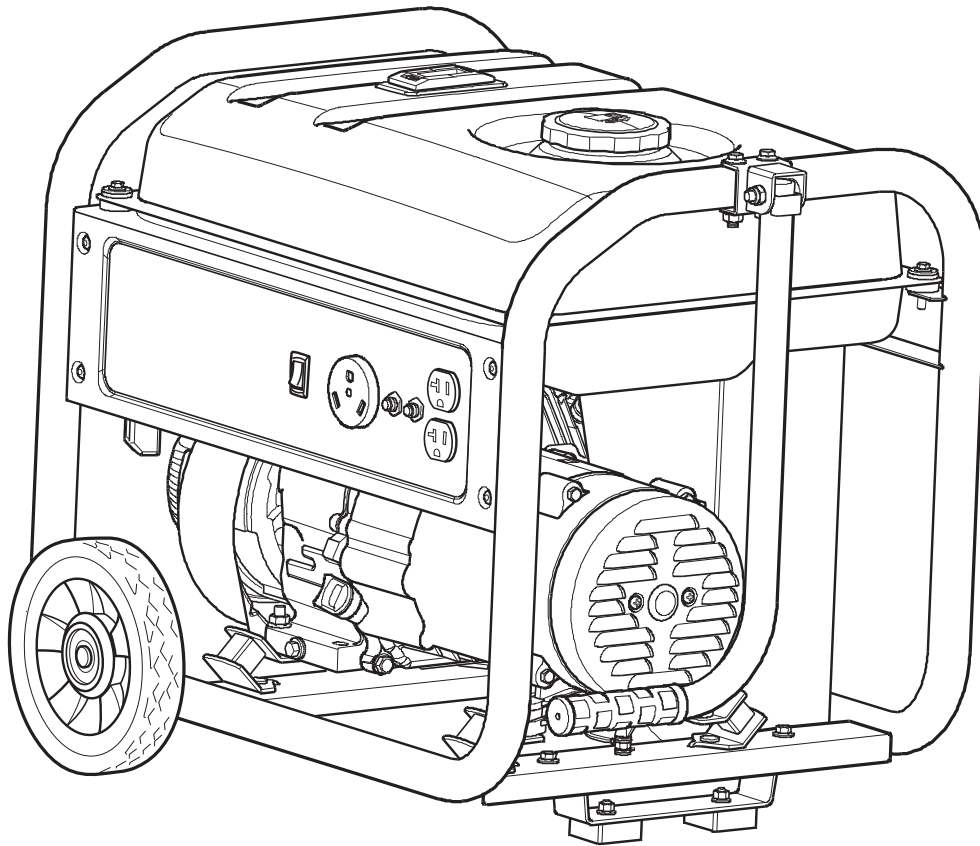




# Wiring Diagram



This generator is rated in accordance with CSA (Canadian Standards Association) standard C22.2 No. 100-94 (motor and generators).

Questions? Help is just a moment away!  
Preguntas? La ayuda es justa un momento lejos!

Call: Portable Generator Helpline  
Llame: Línea Directa del Generador portátil - 1-800-743-4115 M-F 8-5 CST

## Model / Modelo

Mfg. No.	Description / Descripción
030711-00	3,500 Watt Briggs & Stratton

Manual Part No. 1761220

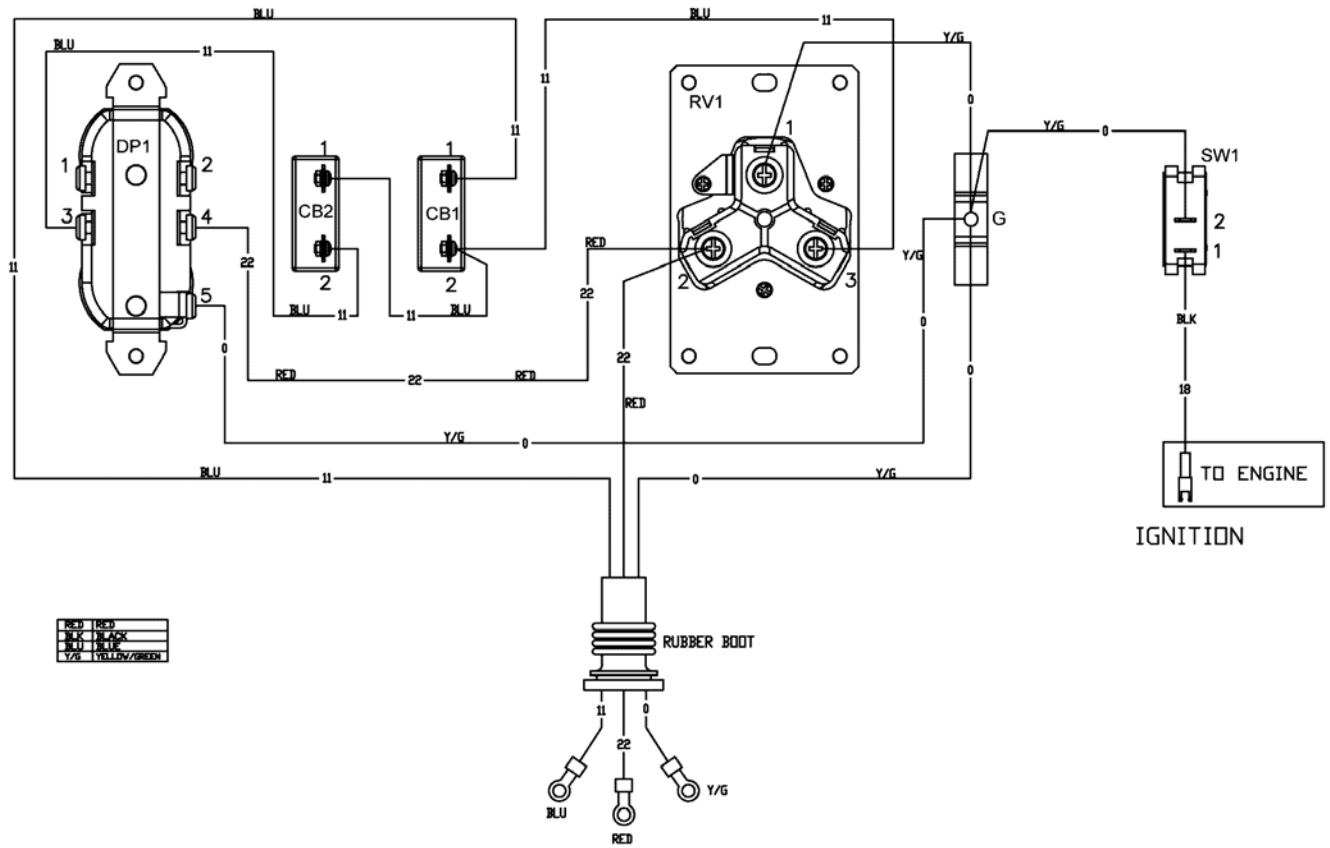
Revision 00

Rev. Date 2/23/2017

Not for  
Reproduction

# Exploded View - Wiring Diagram

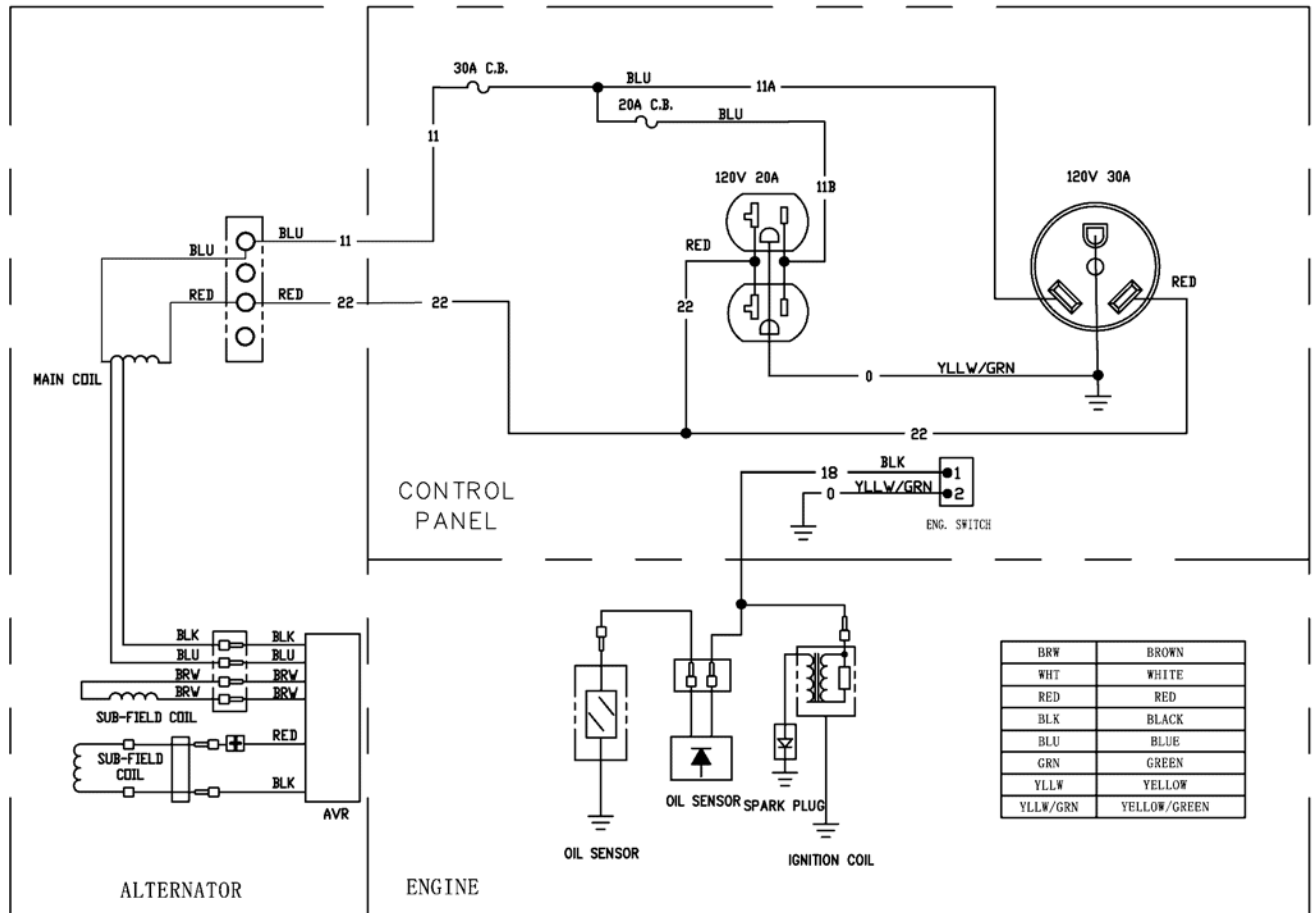
80023925WD



The above parts group applies to the following Mfg. Nos.:  
030711-00

# Exploded View - Wiring Schematic

80023925WS



The above parts group applies to the following Mfg. Nos.:  
030711-00

# Operator Safety

## Equipment Description



Read this manual carefully and become familiar with your generator. Know its applications, its limitations and any hazards involved.

The generator is an engine-driven, revolving field, alternating current (AC) generator. It was designed to supply electrical power for operating compatible electrical lighting, appliances, tools and motor loads. The generator's revolving field is driven at about 3,000 rpm by a single-cylinder engine.

Every effort has been made to ensure that the information in this manual is both accurate and current. However, the manufacturer reserves the right to change, alter or otherwise improve the generator and this documentation at any time without prior notice.

## Important Safety Information

The manufacturer cannot possibly anticipate every possible circumstance that might involve a hazard. The warnings in this manual, and the tags and decals affixed to the unit are, therefore, not all-inclusive. If you use a procedure, work method or operating technique that the manufacturer does not specifically recommend, you must satisfy yourself that it is safe for you and others. You must also make sure that the procedure, work method or operating technique that you choose does not render the generator unsafe.

### Safety and Control Symbols



Toxic Fumes



Kickback



Electrical Shock



Suffocation



Fire



Operator's Manual



Explosion



Suffocation



Moving Parts



Flying Objects



Hot Surface



Heavy Objects



Carbon Monoxide Alarm



Alarm



Bonded to Ground



Ground Terminal



Choke



Run



Off



On



Volt Meter



Oil Level



Fuel



Start



Circuit Breaker



Engine Control



Do Not Start Engine

The safety alert symbol indicates a potential personal injury hazard. A signal word (DANGER, WARNING, or CAUTION) is used with the alert symbol to designate a degree or level of hazard seriousness. A safety symbol may be used to represent the type of hazard. The signal word *NOTICE* is used to address practices not related to personal injury.

**DANGER** indicates a hazard which, if not avoided, *will* result in death or serious injury.

**WARNING** indicates a hazard which, if not avoided, *could* result in death or serious injury.

**CAUTION** indicates a hazard which, if not avoided, *could* result in minor or moderate injury.

**NOTICE** address practices not related to personal injury.

**WARNING POISONOUS GAS HAZARD.** Engine exhaust contains carbon monoxide, a poisonous gas that could kill you in minutes. You CANNOT see it, smell it, or taste it. Even if you do not smell exhaust fumes, you could still be exposed to carbon monoxide gas. If you start to feel sick, dizzy or weak while using this product, shut it off and get to fresh air RIGHT AWAY. See a doctor. You may have carbon monoxide poisoning.


- Operate this product ONLY outside far away from windows, doors and vents to reduce the risk of carbon monoxide gas from accumulating and potentially being drawn towards occupied spaces.
- Install battery-operated carbon monoxide alarms or plug-in carbon monoxide alarms with battery back-up according to the manufacturer's instructions. Smoke alarms cannot detect carbon monoxide gas.
- DO NOT run this product inside homes, garages, basements, crawlspaces, sheds, or other partially-enclosed spaces even if using fans or opening doors and windows for ventilation. Carbon monoxide can quickly build up in these spaces and can linger for hours, even after the product has shut off.
- ALWAYS place this product downwind and point the engine exhaust away from occupied spaces.

**WARNING** Starter cord kickback (rapid retraction) will pull hand and arm toward engine faster than you can let go which could cause broken bones, fractures, bruises, or sprains resulting in serious injury.


- When starting engine, pull cord slowly until resistance is felt and then pull rapidly to avoid kickback.
- NEVER start or stop engine with electrical devices plugged in and turned on.

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

- Use approved transfer equipment to prevent backfeed by isolating generator from electric utility workers.
- When using generator for backup power, notify utility company.
- DO NOT connect generator to a building's electrical system.
- Use a residual current circuit breaker with overload protection device (RCBO) in any damp or highly conductive area, such as metal decking or steel work.
- DO NOT touch bare wires or receptacles.
- DO NOT use generator with electrical cords which are worn, frayed, bare or otherwise damaged.
- DO NOT operate generator in the rain or wet weather.
- DO NOT handle generator or electrical cords while standing in water, while barefoot, or while hands or feet are wet.
- DO NOT allow unqualified persons or children to operate or service generator.

 **WARNING** Exhaust heat/gases could ignite combustibles, structures or damage fuel tank causing a fire, resulting in death or serious injury. Contact with muffler area could cause burns resulting in serious injury.

- DO NOT touch hot parts and AVOID hot exhaust gases.
- Allow equipment to cool before touching.
- Keep at least 1.5 m (5 ft.) of clearance on all sides of generator including overhead.
- Contact the original equipment manufacturer, retailer, or dealer to obtain a spark arrester designed for the exhaust system installed on this engine.
- Replacement parts must be the same and installed in the same position as the original parts.


 **WARNING** Unintentional sparking could cause fire or electric shock resulting in death or serious injury.

**WHEN ADJUSTING OR MAKING REPAIRS TO YOUR GENERATOR**


- Disconnect the spark plug wire from the spark plug and place the wire where it cannot contact spark plug.

**WHEN TESTING FOR ENGINE SPARK**

- Use approved spark plug tester.
- DO NOT check for spark with spark plug removed.

 **WARNING** Starter and other rotating parts could entangle hands, hair, clothing, or accessories resulting in serious injury.

- NEVER operate generator without protective housing or covers.
- DO NOT wear loose clothing, jewelry or anything that could be caught in the starter or other rotating parts.
- Tie up long hair and remove jewelry.

 **WARNING** Fuel and its vapors are extremely flammable and explosive which could cause burns, fire or explosion resulting in death or serious injury.

**WHEN ADDING OR DRAINING FUEL**

- Turn generator engine OFF and let it cool at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Fill or drain fuel tank outdoors.
- DO NOT overfill tank. Allow space for fuel expansion.
- If fuel spills, wait until it evaporates before starting engine.
- Keep fuel away from sparks, open flames, pilot lights, heat, and other ignition sources.
- Check fuel lines, tank, cap and fittings frequently for cracks or leaks. Replace if necessary.
- DO NOT light a cigarette or smoke.

**WHEN STARTING EQUIPMENT**

- Ensure spark plug, muffler, fuel cap, and air cleaner are in place.
- DO NOT crank engine with spark plug removed.

**WHEN OPERATING EQUIPMENT**


- DO NOT operate this product inside any building, carport, porch, mobile equipment, marine applications, or enclosure.
- DO NOT tip engine or equipment at angle which causes fuel to spill.
- DO NOT stop engine by moving choke control to “Choke” position (|X|).

**WHEN TRANSPORTING, MOVING OR REPAIRING EQUIPMENT**

- Transport/move/repair with fuel tank EMPTY or with fuel shutoff valve OFF.
- DO NOT tip engine or equipment at angle which causes fuel to spill.
- Disconnect spark plug wire.

**WHEN STORING FUEL OR EQUIPMENT WITH FUEL IN TANK**

- Store away from furnaces, stoves, water heaters, clothes dryers, or other appliances that have pilot light or other ignition source because they could ignite fuel vapors.

 **CAUTION** Excessively high operating speeds could result in minor injury. Excessively low speeds impose a heavy load.

- DO NOT tamper with governor spring, links or other parts to increase engine speed.
- DO NOT modify generator in any way.

**NOTICE** Exceeding generators wattage/amperage capacity could damage generator and/or electrical devices connected to it.

- DO NOT exceed the generator's wattage/amperage capacity. See *Don't Overload Generator* in the *Operation* section.
- Start generator and let engine stabilize before connecting electrical loads.
- Connect electrical loads in OFF position, then turn ON for operation.
- Turn electrical loads OFF and disconnect from generator before stopping generator.

**NOTICE** Improper treatment of generator could damage it and shorten its life.

- Use generator only for intended uses.
- If you have questions about intended use, ask dealer or contact local service center.
- Operate generator only on level surfaces.
- DO NOT expose generator to excessive moisture, dust, dirt, or corrosive vapors.
- DO NOT insert any objects through cooling slots.
- If connected devices overheat, turn them off and disconnect them from generator.
- Shut off generator if:
  - electrical output is lost;
  - equipment sparks, smokes, or emits flames;
  - unit vibrates excessively.

## Assembly

Your generator is ready for use after it has been properly serviced with the recommended petrol and oil.

If you have any problems with the servicing of your generator, contact your local Briggs & Stratton service center. If you need assistance, please have the model, revision, and serial number from the identification label available. See *Features and Controls* for identification label location.

### Unpack Generator

1. Set the carton on a rigid, flat surface.
2. Remove everything from carton.

The generator is supplied with:

- Operator's manual
- Wheel kit
- Bottle of engine oil

### Install Wheel Kit **Figure 1**

**NOTICE** Wheel kit is not intended for over-the-road use.

Install the wheel kit as follows:

1. Tip generator so that engine end is up.
2. Slide a washer (A) over axle stud (B).
3. Slide a wheel (C) over axle stud (B).

**NOTICE** Be sure to install wheel with raised hub inboard.

4. Slide axle stud (B) through mounting bracket.
5. Insert retaining pin (D) through hole on axle stud.
6. Repeat steps 2 thru 5 to secure second wheel.
7. Line up holes in support leg (E) with holes in generator frame.
8. Attach support leg using four capscrews (F) and four flange nuts (G). Tighten with 10 and 13 mm wrenches.
9. Return generator to normal operating position (resting on wheels and support leg).

### Add Engine Oil

1. Place generator on a level surface.
2. Add engine oil as described in *Adding Engine Oil* of the *Engine Maintenance* section.

**NOTICE** Improper treatment of generator could damage it and shorten its life.

- DO NOT attempt to crank or start the engine before it has been properly serviced with the recommended oil. This could result in an engine failure.


### Add Fuel **Figure 2**

Fuel must meet these requirements:

- Clean, fresh, unleaded petrol.
- A minimum of 87 octane/87 AKI (91 RON). For high altitude use, see *High Altitude*.
- Petrol with up to 10% ethanol (gasohol) is acceptable.

**NOTICE** Use of unapproved fuels will damage the engine components and void the engine warranty.

- DO NOT use unapproved petrol, such as E15 and E85.
- DO NOT mix oil in petrol or modify the engine to run on alternate fuels.

 **WARNING** Fuel and its vapors are extremely flammable and explosive which could cause burns, fire or explosion resulting in death or serious injury.

#### WHEN ADDING FUEL

- Turn generator engine OFF and let it cool at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Fill fuel tank outdoors.
- DO NOT overfill tank. Allow space for fuel expansion.
- If fuel spills, wait until it evaporates before starting engine.
- Keep fuel away from sparks, open flames, pilot lights, heat, and other ignition sources.
- Check fuel lines, tank, cap and fittings frequently for cracks or leaks. Replace if necessary.
- DO NOT light a cigarette or smoke.

To protect the fuel system from gum formation, mix in a fuel stabilizer when adding fuel. See *Storage*. All fuel is not the same. If you experience starting or performance problems after using fuel, switch to a different fuel provider or change brands. This engine is certified to operate on petrol. The emission control system for this engine is EM (Engine Modifications).

1. Clean area around fuel fill cap, remove cap.
2. Slowly add unleaded fuel to fuel tank. Be careful not to fill above the red fuel level indicator (A). This allows adequate space for fuel expansion as shown.
3. Install fuel cap and let any spilled fuel evaporate before starting engine.

### High Altitude

At altitudes over 1500 meters (5,000 feet), a minimum 85 octane / 85 AKI (89 RON) petrol is acceptable. To remain emissions compliant, high altitude adjustment is required. Operation without this adjustment will cause decreased performance, increased fuel consumption, and increased emissions. See a Briggs & Stratton authorized dealer for high altitude adjustment information. Operation of the engine at altitudes below 750 meters (2,500 feet) with the high altitude kit is not recommended.

### System Ground

The generator is provided with a grounding fastener. The generator has a system ground that connects the generator frame components to the ground terminals on the AC output receptacles. The system ground is connected to the AC neutral wire (the neutral is bonded to the generator frame).


### Special Requirements

There may be Federal, local codes, or ordinances that apply to the intended use of the generator. Please consult a qualified electrician, electrical inspector, or the local agency having jurisdiction:

- In some areas, generators are required to be registered with local utility companies.
- If the generator is used at a construction site, there may be additional regulations which must be observed.

### Connecting to a Building's Electrical System

Connections for standby power to a building's electrical system must use a listed transfer switch installed by a current licensed electrician. The connection must isolate the generator power from the utility power and must comply with all applicable laws and electrical codes.

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

- Use approved transfer equipment to prevent backfeed by isolating generator from electric utility workers.
- When using generator for backup power, notify utility company.
- DO NOT connect generator to a building's electrical system.
- Use a residual current circuit breaker with overload protection device (RCBO) in any damp or highly conductive area, such as metal decking or steel work.
- DO NOT touch bare wires or receptacles.
- DO NOT use generator with electrical cords which are worn, frayed, bare or otherwise damaged.
- DO NOT operate generator in the rain or wet weather.
- DO NOT handle generator or electrical cords while standing in water, while barefoot, or while hands or feet are wet.
- DO NOT allow unqualified persons or children to operate or service generator.

### Generator Location

Before starting the portable generator there are two equally important safety concerns regarding carbon monoxide (CO) poisoning and fire that must be addressed.

**NOTICE** Satisfying the RISK OF CARBON MONOXIDE POISONING location requirements may not satisfy the fire location requirements. Satisfying the RISK OF FIRE location requirements may not satisfy the CARBON MONOXIDE POISONING location requirements.

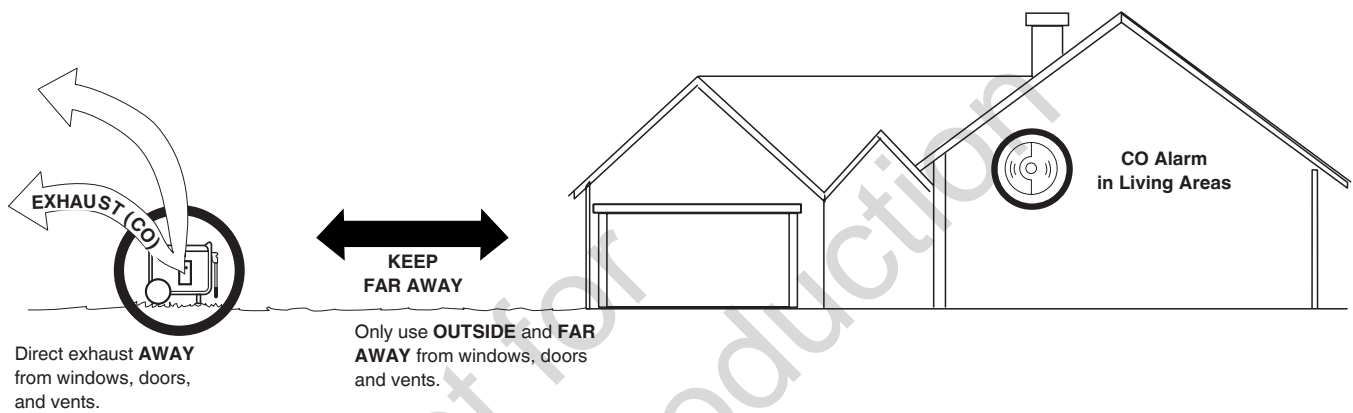
### Operation Location of Portable Generator to REDUCE THE RISK OF CARBON MONOXIDE POISONING

All fossil fuel burning equipment, such as a portable generator, contains carbon monoxide (CO) gas in the engine exhaust, a poisonous gas that could kill you in minutes. You 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. The following must be completed prior to starting the portable generator engine:

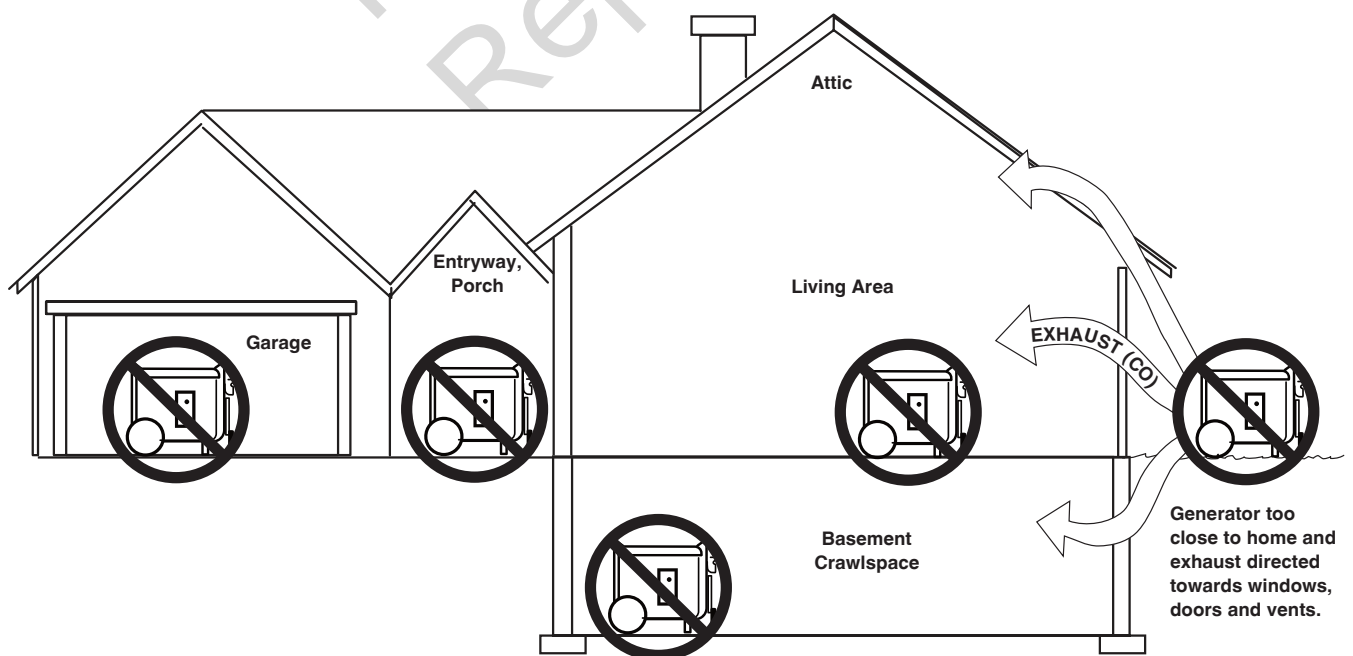
- By law it is required in many states to have a Carbon Monoxide (CO) alarm (A) in operating condition in your home. Install/maintain battery-operated carbon monoxide alarms or plug-in carbon monoxide alarms with battery back-up according to the manufacturer's instructions. A CO alarm is an electronic device that detects hazardous levels of CO. When there is a buildup of CO, the alarm will alert the occupants by flashing visual indicator light and alarm. Smoke alarms cannot detect CO gas.
- Operate this product ONLY outside far away from windows, doors and vents to reduce the risk of carbon monoxide gas from accumulating and potentially being drawn towards occupied spaces.
- DO NOT run this product inside homes, garages, basements, crawlspaces, sheds, or other partially enclosed spaces even if using fans or opening doors and windows for ventilation. Carbon monoxide can quickly build up in these spaces and can linger for hours, even after this product has shut off.
- Your neighbor(s) home may be exposed to the engine exhaust from your portable generator and must be considered when deciding on a location for the safe operation of your portable generator.
- ALWAYS place this product downwind and point the engine exhaust away from occupied spaces.

If you start to feel sick, dizzy, or weak while using this product, shut it off and get to fresh air RIGHT AWAY. See a doctor. You may have carbon monoxide poisoning.

## EXAMPLE OF LOCATION TO REDUCE THE RISK OF CARBON MONOXIDE POISONING



## DO NOT OPERATE IN ANY OF THE FOLLOWING LOCATIONS





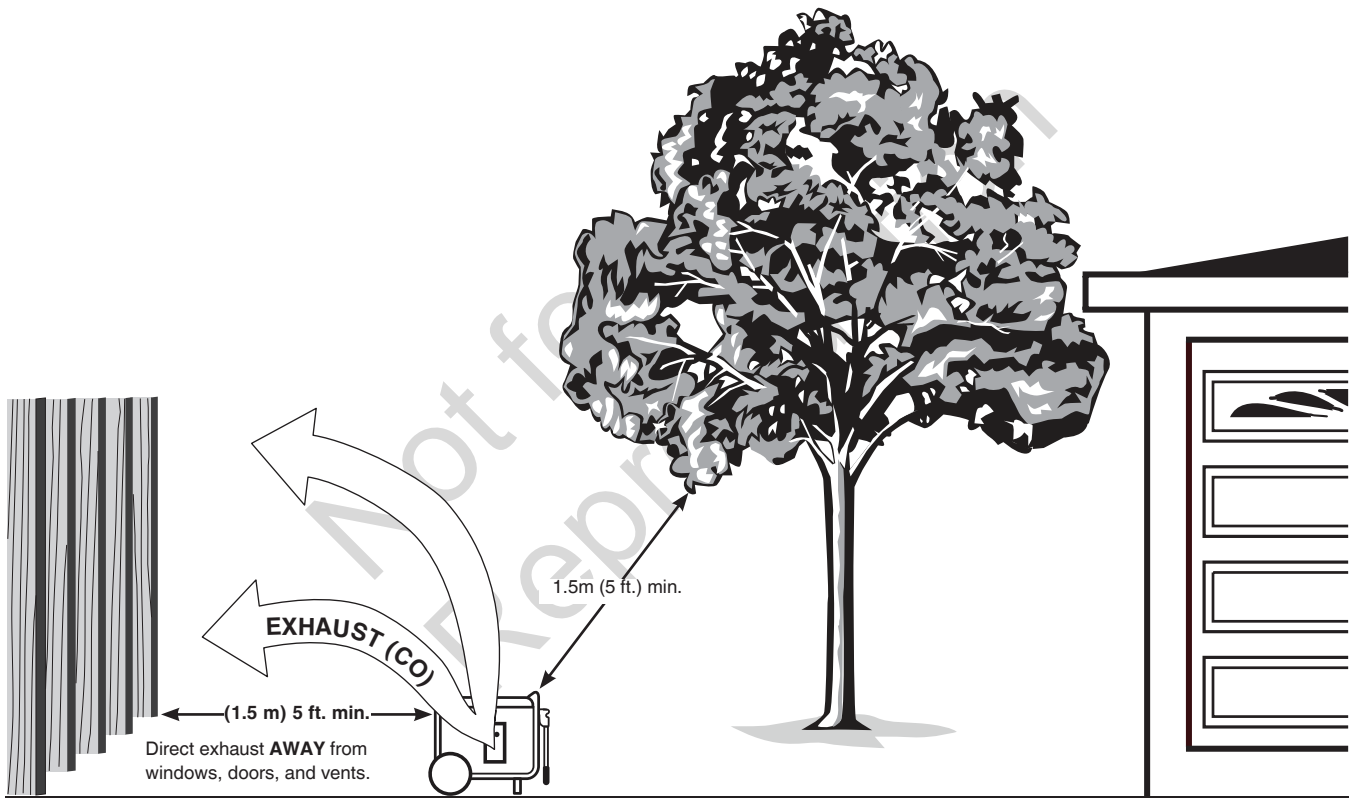
**OPERATION LOCATION OF PORTABLE GENERATOR TO REDUCE THE RISK OF FIRE**

**⚠ WARNING** Exhaust heat/gases could ignite combustibles, structures or damage fuel tank causing a fire, resulting in death or serious injury.



- Portable generator must be at least 1.5 m (5 feet) from any structure, overhang, trees, windows, doors, any wall opening, shrubs, or vegetation over 30.5cm (12 inches) in height.
- DO NOT place portable generator under a deck or other type of structure that may confine airflow.
- Smoke alarm(s) MUST be installed and maintained indoors according to the manufacturer's instructions/recommendations. Carbon monoxide alarms cannot detect smoke.
- DO NOT place portable generator in manner other than shown.

**EXAMPLE OF LOCATION TO REDUCE THE RISK OF FIRE**



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