Operator's Manual

GEN27WN, GEN30WL, GEN42WN & GEN45WL

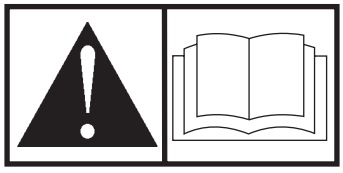
Liquid-Cooled Residential Generator System

Questions?

Help is just a moment away!

Call: **Home Generator Helpline**

(877) 369-9400 M-F 8-5 CT



Thank you for purchasing this quality-built Rheem / Ruud residential standby generator. We are pleased that you've placed your confidence in the Rheem or Ruud brand. When operated and maintained according to the instructions in this manual, your Rheem / Ruud generator will provide many years of dependable service.

This manual contains safety information to make you aware of the hazards and risks associated with residential standby generators and how to avoid them. Because Rheem does not necessarily know all the applications this equipment could be used for, it is important that you read and understand these instructions thoroughly before attempting to start or operate this equipment. **Save these instructions for future reference.**

This residential standby generator requires professional installation before use. Refer to the separate Installation manual for instructions on safe installation procedures. Your installer should follow the instructions completely.

Where to Find Us

You never have to look far to find support and service for your generator. Consult your Yellow Pages. There are many Rheem and Ruud authorized service dealers who provide quality service. You can also contact Rheem/Ruud Customer Service by phone at **(877) 369-9400.**

Generator and engine model and serial numbers should be recorded in the Installation Manual.

Rheem Sales Company
Randleman, NC 27317
(877) 369-9400

Table of Contents

Save These Instructions

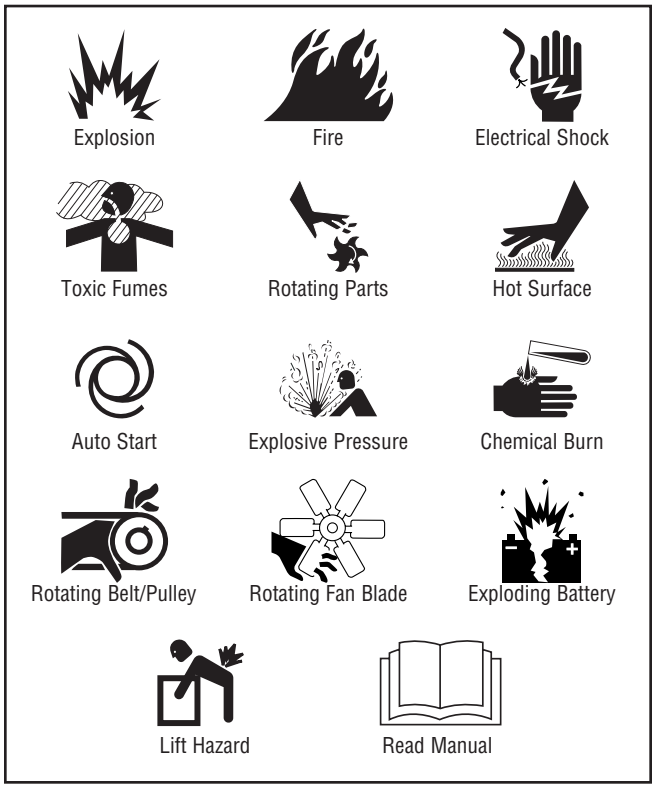
Important Safety Instructions

SAVE THESE INSTRUCTIONS - This manual contains important instructions that should be followed during installation and maintenance of the generator and batteries.

The safety alert symbol (⚠) is used with a signal word (DANGER, CAUTION, WARNING), a pictorial and/or a safety message to alert you to hazards. **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, might result in minor or moderate injury. ***NOTICE*** indicates a situation that could result in equipment damage. Follow safety messages to avoid or reduce the risk of injury or death.

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 system unsafe.

Hazard Symbols and Meanings



⚠ WARNING

Running engine gives off carbon monoxide, an odorless, colorless, poison gas.

Breathing carbon monoxide can cause headache, fatigue, dizziness, vomiting, confusion, seizures, nausea, fainting or death.

- Operate generator ONLY outdoors.
- Install a battery operated carbon monoxide alarm near the bedrooms.
- Keep exhaust gas from entering a confined area through windows, doors, ventilation intakes, or other openings.

⚠ WARNING

Storage batteries give off explosive hydrogen gas during recharging.

Slightest spark will ignite hydrogen and cause explosion.

Battery electrolyte fluid contains acid and is extremely caustic.

Contact with battery contents will cause severe chemical burns.

A battery presents a risk of electrical shock and high short circuit current.

- DO NOT dispose of battery in a fire. Recycle battery.
- DO NOT allow any open flame, spark, heat, or lit cigarette during and for several minutes after charging a battery.
- DO NOT open or mutilate the battery.
- Wear protective goggles, rubber apron, rubber boots and rubber gloves.
- Remove watches, rings, or other metal objects.
- Use tools with insulated handles.

⚠ WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

⚠ WARNING

Certain components in this product and related accessories contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Wash hands after handling.

⚠ WARNING

Generator produces hazardous voltage.

Failure to properly ground generator can result in electrocution.

Failure to isolate generator from power utility can result in death or injury to electric utility workers due to backfeed of electrical energy.

- When using generator for backup power, notify utility company.
- DO NOT touch bare wires or bare receptacles.
- DO NOT use generator with electrical cords which are worn, frayed, bare or otherwise damaged.
- DO NOT handle generator or electrical cords while standing in water, while barefoot, or while hands or feet are wet.
- If you must work around a unit while it is operating, stand on an insulated dry surface to reduce the risk of a shock hazard.
- DO NOT allow unqualified persons or children to operate or service generator.
- In case of an accident caused by electrical shock, immediately shut down the source of electrical power and contact the local authorities. **Avoid direct contact with the victim**.
- Despite the safe design of the residential generator, operating this equipment imprudently, neglecting its maintenance or being careless can cause possible injury or death.
- Remain alert at all times while working on this equipment. Never work on the equipment when you are physically or mentally fatigued.
- Before performing any maintenance on the generator, disconnect the battery cable indicated by a **NEGATIVE**, **NEG** or (**-**) first. When finished, reconnect that cable last.
- After your system is installed, the generator may crank and start without warning any time there is a power failure. To prevent possible injury, always set the generator's system switch to **OFF**, remove the service disconnect from the disconnect box **AND** remove the 15 Amp fuse BEFORE working on the equipment.

⚠ WARNING

Propane and Natural Gas are extremely flammable and explosive.

Fire or explosion can cause severe burns or death.

- Install the fuel supply system according to NFPA 37 and other applicable fuel-gas codes.
- Before placing the generator into service, the fuel system lines must be properly purged and leak tested.
- After the generator is installed, you should inspect the fuel system periodically.
- NO leakage is permitted.
- DO NOT operate engine if smell of fuel is present or other explosive conditions exist.
- DO NOT smoke around the generator. Wipe up any oil spills immediately. Ensure that no combustible materials are left in the generator compartment. Keep the area near the generator clean and free of debris.

⚠ WARNING

Contact with muffler area can result in serious burns.

Exhaust heat/gases can ignite combustibles or structures causing a fire.

- DO NOT touch hot parts and AVOID hot exhaust gases.
- Allow equipment to cool before touching.
- DO NOT install the generator closer than 5 feet (1.5m) from any combustibles or structures with combustible walls having a fire resistance rating of less than 1 hour.
- Keep at least minimum distances shown in *General Location Guidelines* to insure for proper generator cooling and maintenance clearances.
- It is a violation of California Public Resource Code, Section 4442, to use or operate the engine on any forest-covered, brush-covered, or grass-covered land unless the exhaust system is equipped with a spark arrester, as defined in Section 4442, maintained in effective working order. Other states or federal jurisdictions may have similar laws.
  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

Starter and other rotating parts can entangle hands, hair, clothing, or accessories.

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

⚠ CAUTION

Installing the 15A fuse could cause the engine to start.

- Observe that the 15 Amp fuse has been removed from the control panel for shipping.
- DO NOT install this fuse until all plumbing and wiring has been completed and inspected.

⚠ CAUTION

Excessively high operating speeds increase risk of injury and damage to generator.

Excessively low speeds impose a heavy load.

- DO NOT tamper with governed speed. Generator supplies correct rated frequency and voltage when running at governed speed.
- DO NOT modify generator in any way.

NOTICE

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

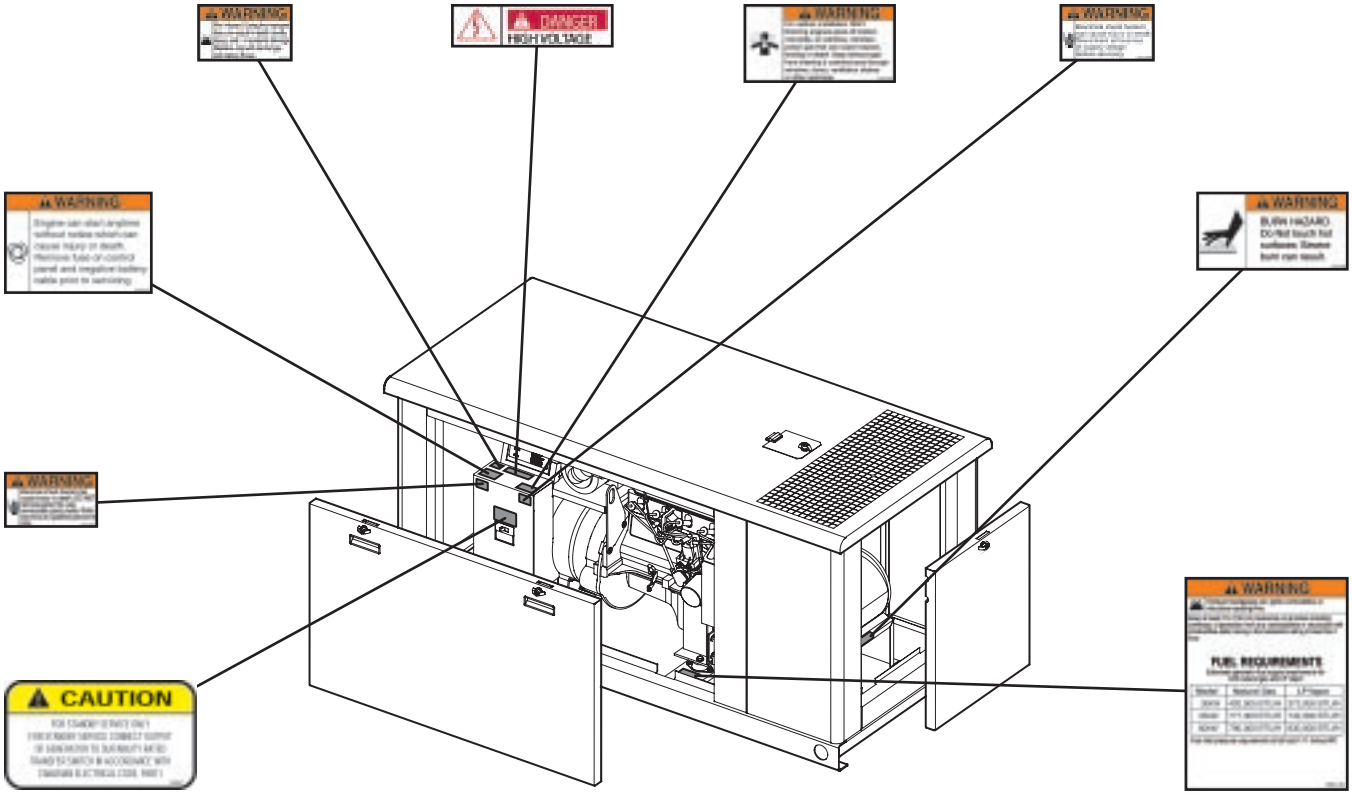
- See *Essential Circuits* in operator's manual.
- Start generator and let engine stabilize before connecting electrical loads.

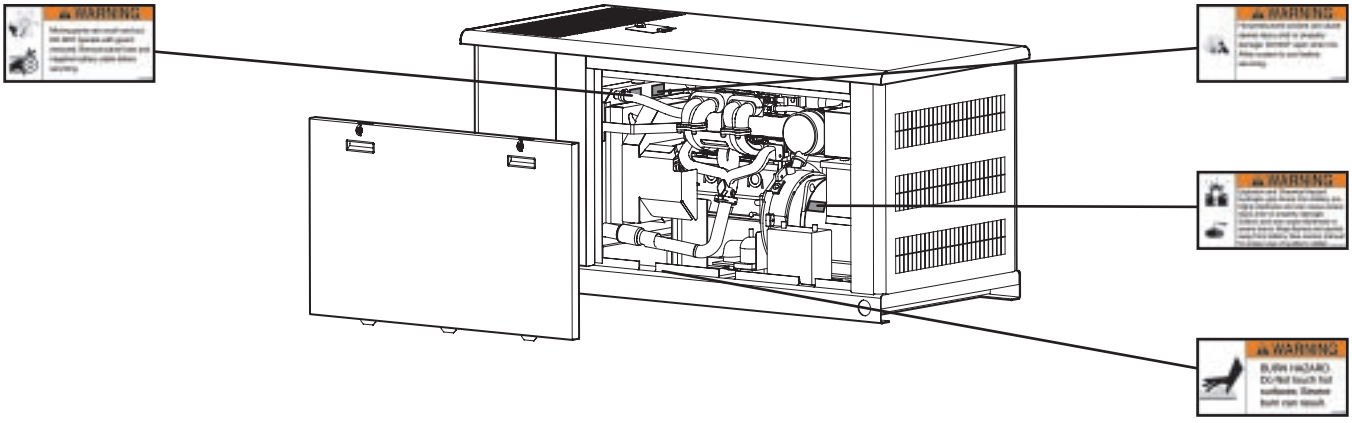
NOTICE

Improper treatment of generator can damage it and shorten its life.

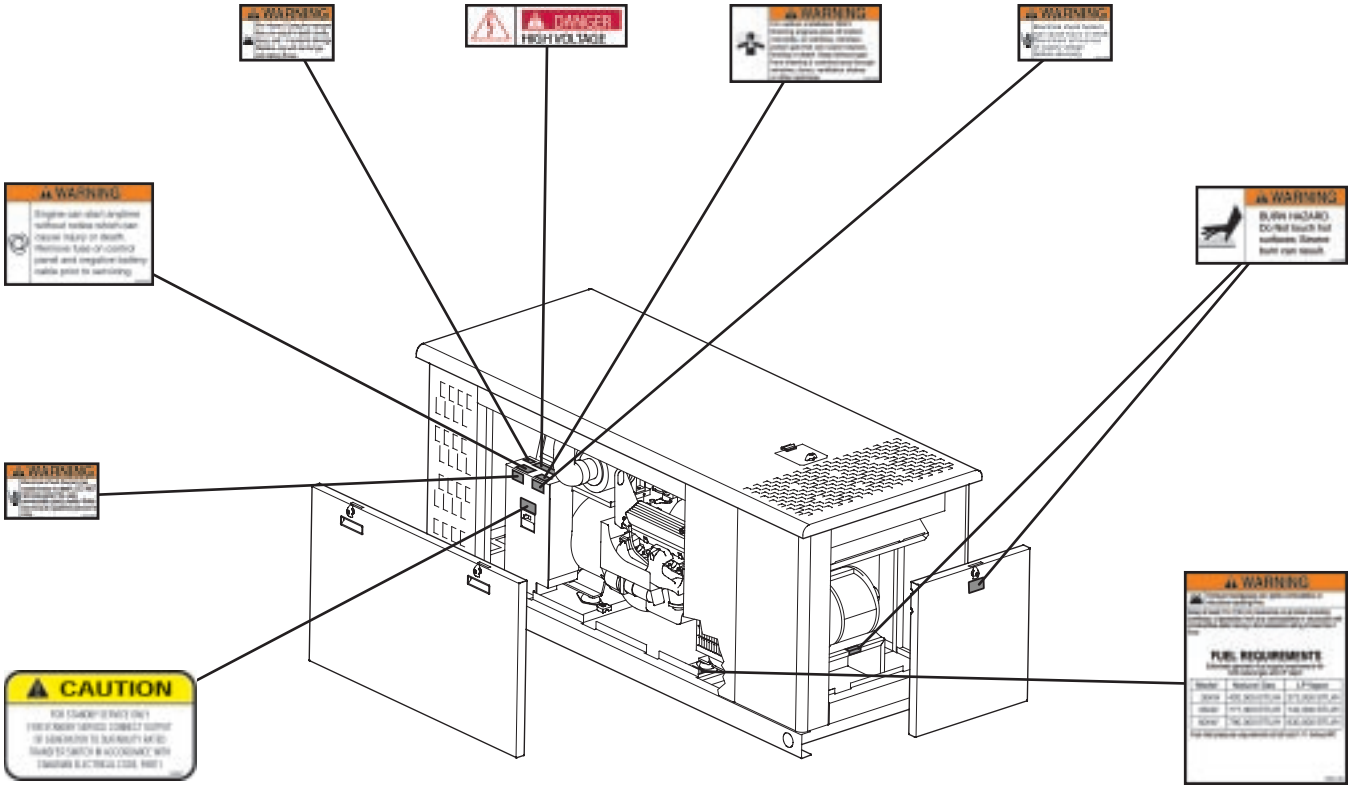
- Use generator only for intended uses.
- If you have questions about intended use, contact your authorized dealer.
- Operate generator only on level surfaces.
- Adequate, unobstructed flow of cooling and ventilating air is critical to correct generator operation.
- The Oil Fill, Oil Drain and the Control Panel doors must be installed whenever the unit is running.
- DO NOT expose generator to excessive moisture, dust, dirt, or corrosive vapors.
- Despite the safe design of the residential generator, operating this equipment imprudently, neglecting its maintenance or being careless can cause possible injury or death.
- Remain alert at all times while working on this equipment. Never work on the equipment when you are physically or mentally fatigued.
- DO NOT start engine with air cleaner or air cleaner cover removed.
- DO NOT insert any objects through cooling slots.
- DO NOT use the generator or any of its parts as a step. Stepping on the unit can cause stress and break parts. This may result in dangerous operating conditions from leaking exhaust gases, fuel leakage, oil leakage, etc.
- 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.

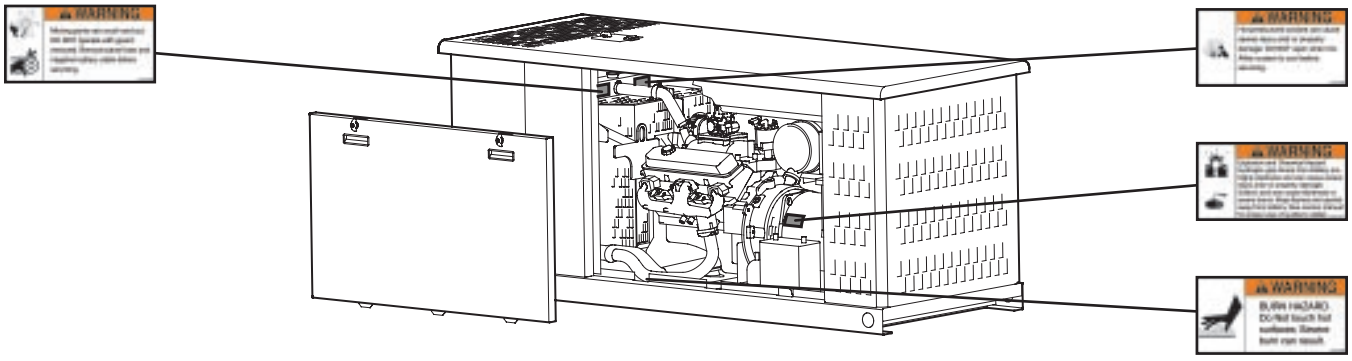
Safety Label Locations - 30kW





Safety Label Locations - 45kW





Installation

We sincerely appreciate your patronage. For this reason, we have made every effort to provide for a safe, streamlined and cost-effective installation. Because each installation is unique, it is impossible to know of and advise the trade of all conceivable procedures and methods by which installation might be achieved. Neither could we know of possible hazards and/or the results of each method or procedure. For these reasons,

Only current licensed electrical and plumbing contractors should attempt residential generator system installations. Installations must strictly comply with all applicable codes, industry standards and regulations.

Your residential generator is supplied with this "Operator's Manual" and a separate "Installation Manual". These are important documents and should be retained by the owner after the installation has been completed.

For the Home Owner

To help you make informed choices and communicate effectively with your installation contractor(s),

Read and understand *Owner Orientation* in this manual before contracting or starting your residential generator installation.

To arrange for proper installation, contact the store at which you purchased your residential generator, your dealer, a licensed electrician or your utility power provider.

The residential generator warranty is VOID unless the system is installed by licensed electrical and plumbing professionals.

The Emission Control System for this generator is warranted for standards set by the U.S. Environmental Protection Agency and by the California Air Resources Board (CARB).

For the Installing Dealer/Contractor

For most applications, the Installation manual contains all the information required to properly install and start the residential generator. This Operator's Manual describes essential circuit selection, routine operation and owner maintenance procedures.

If you need more information, call **(877) 369-9400**, between 8:00 AM and 5:00 PM CT.

Owner Orientation

This section provides residential generator owners with the information necessary to achieve the most satisfactory and cost effective installation possible.

Illustrations are for typical circumstances and are meant to familiarize you with the installation options available with your system. A thorough understanding of these options will provide some control over the cost of your installation, as well as ensure your final satisfaction and security.

Federal and local codes, appearance, noise levels, fuel types, and distances are the factors that must be considered when negotiating with an installation professional. Remember that as the distance from the existing electrical service and gaseous fuel supply increases, and the number of 90 degree bends in the fuel supply increases; compensations in piping and wiring materials must be made. This is necessary to comply with local codes and overcome electrical voltage drops and gaseous fuel pressure drops.

The factors mentioned above will have a direct affect on the overall price of your residential generator installation.

NOTE: In some areas you may need to acquire electrical permits for installing the residential generator, building permits for installing gas lines, and permits for noise allowances. Your installer should check your local codes AND obtain the permits before installing the system.

Fuel Factors

This residential generator system was factory tested and adjusted using either LP vapor or natural gas. For proper engine function, factors that are inherent to each of these fuels, your location and the duration of possible utility interruptions are important considerations in the following fuel guidelines:

- Use clean, dry fuel, free of moisture or any particulate material. Using fuels outside the following recommended values may cause performance problems.
- For engines set up to run on propane vapor (LP), commercial grade HD5 propane with a minimum fuel energy of 2500 BTUs/ft3 with maximum propylene content of 5% and butane and heavier gas content of 2.5% and minimum propane content of 90%.

⚠ WARNING

Propane and Natural Gas are extremely flammable and explosive.

Fire or explosion can cause severe burns or death.

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

Power Decrease at High Altitude or High Temperature

Air density is less at high altitudes, resulting in less available engine power. Specifically, engine power will decrease 3.5% for each 1,000 feet (300 meters) above sea level and 1% for each 10° F (5.6°C) above 77°F (25°C). Make sure you and your installer consider these factors when determining total generator load.

Generator Location

The actual physical location of your residential generator has a direct affect on:

1. The amount of plumbing required to fuel your generator.
2. The amount of wiring required to control and connect your generator.

NOTE: Specific location guidelines are discussed in the Installation Manual. Acquaint yourself with that information and confer with your installer. Be sure to ask how your site might affect installation costs and compliance with local codes and standards.

Generator Clearances

The generator must be installed outdoors. DO NOT install generator where exhaust gas could accumulate and enter inside or be drawn into a potentially occupied building. Ensure exhaust gas is kept away from any windows, doors, ventilation intakes or other openings that can allow exhaust gas to collect in a confined area. Prevailing winds and air currents should be taken into consideration when positioning generator. See the Installation Manual for full details on safe generator location.

⚠ WARNING

Exhaust heat/gases can ignite combustibles or structures causing a fire.

- DO NOT install the generator closer than 5 feet (1.5m) from any combustibles or structures with combustible walls having a fire resistance rating of less than 1 hour.

Essential Circuits

As a residential generator owner, it is important that you clearly identify the circuits in your building that are “essential” to you.

It is also important that your installer understand **which** circuits you want to include as “Essential Circuits”. Depending on the power consumed by these circuits, most or all of them can be switched to the residential generator for the duration of normal power interruption.

The wattage reference table that follows will assist you with your decision-making process. It provides the wattage used by many ordinary household devices. Use it as a guide when selecting your essential circuits. Review this information with your installer and ask about any technical considerations that might affect your installation. This chart serves as a guide only. For exact wattage use an appropriate wattage meter.

	Device	Running Watts
	Air Conditioner (12,000 Btu)*	1700
	Air Conditioner (24,000 Btu)*	3800
	Air Conditioner (40,000 Btu)*	6000
	Battery Charger (20 Amp)	500
	Circular Saw (6-1/2”)	800 to 1000
	Clothes Dryer (Electric)*	5750
	Clothes Dryer (Gas)*	700
	Clothes Washer*	1150
	Coffee Maker	1750
	Compressor (1 HP)*	2000
	Compressor (1/2 HP)*	1400
	Compressor (3/4 HP)*	1800
	Curling Iron	700
	Dehumidifier*	650
	Electric Blanket	400
	Electric Range (per element)	1500
	Electric Skillet	1250
	Freezer*	700
	Furnace Fan (1/2 HP)*	800
	Garage Door Opener*	500 to 750
	Hair Dryer	1200
	Hand Drill	250 to 1100
	Iron	1200
	Jet Pump*	800
	Light Bulb	100
	Microwave Oven	700 to 1000
	Milk Cooler*	1100
	Oil Burner on Furnace	300
	Oil Fired Space Heater (140,000 Btu)	400
	Oil Fired Space Heater (30,000 Btu)	150
	Oil Fired Space Heater (85,000 Btu)	225
	Radio	50 to 200
	Refrigerator	700
	Slow Cooker	200
	Submersible Pump (1 HP)*	2000
	Submersible Pump (1/2 HP)*	1500
	Submersible Pump (1-1/2 HP)*	2800
	Sump Pump*	800 to 1050
	Table Saw (10”)*	1750 to 2000
	Television	200 to 500
	Toaster	1000 to 1650
*Allow three (3) times listed watts for starting device		

Essential Circuit Selection

When selecting the essential circuits that will be switched to "Standby Power," it is important that the sum of the combined circuit loads does not exceed the wattage/ amperage capacity of the generator. To help you with your selection of essential circuits, please consider the following:

- Add up the total wattage of all electrical devices to be connected at one time. This total should **NOT** be greater than the generator's wattage capacity.

  The rated wattage of lights can be taken from light bulbs. The rated wattage of tools, appliances and motors can usually be found on a data plate or label affixed to the device.
- If the appliance, tool or motor nameplate does not list wattage, multiply volts times the ampere rating to determine watts (**V**olts x **A**mps = **W**atts).

  Some electric motors (induction types) require about three times more watts of power for starting than for running. This surge lasts for only a few seconds. Be sure you allow for this high starting wattage when selecting electrical devices that will be energized by the residential generator:
  - Figure the watts required to start the largest motor.
  - Add that to the total running watts of all other connected loads.

This residential generator complies with the following "stationary standby power rating":

The standby power rating is applicable for supplying power for the duration of normal power interruption. No sustained overload capability is available for this rating.

This rating is applicable to installations served by a reliable normal utility source. This rating is only applicable to variable loads with an average load factor of 80% of the standby rating. The standby rating is only applicable for optional standby power where the generator set serves as the backup to the normal utility source.

Use the wattage reference table provided and mark those circuits you consider "critical" or "essential". Make sure you and your installer consider the system's altitude above sea level and the ambient temperature range when determining total generator load.

In a utility outage, you need to 'manage' power distribution by turning off non-essential loads. Some examples of non essential loads are as follows:

- Pool pump
- Hot tub
- Electric hot tub and/or pool heaters
- Central air conditioners
- Electric hot water heaters
- Electric range and/or oven
- Arc welder
- Non essential electric heaters

Delivery Inspection

Carefully inspect the residential generator for any damage that may have occurred during shipment.

IMPORTANT: If loss or damage is noted at time of delivery, have the person(s) making delivery note all damage on the freight bill and affix his signature under the consignor's memo of loss or damage. If loss or damage is noted after delivery, separate the damaged materials and contact the carrier and your installer for claim procedures. Missing or damaged parts are not warranted.

The generator system is supplied with:

- Residential generator
- Fully-serviced coolant system
- Fully-serviced oil/lubricating system
- 650 CCA 55 amp-hour starting battery
- Flexible fuel hook-up hose
- Installation and start-up manual
- Operator's manual
- Engine operator's manual
- Installation checklist
- Two access door keys
- One spare 15A fuse
- 10 Pole control panel connector
- Remote LED indicator kit (red LED/plate/screws)

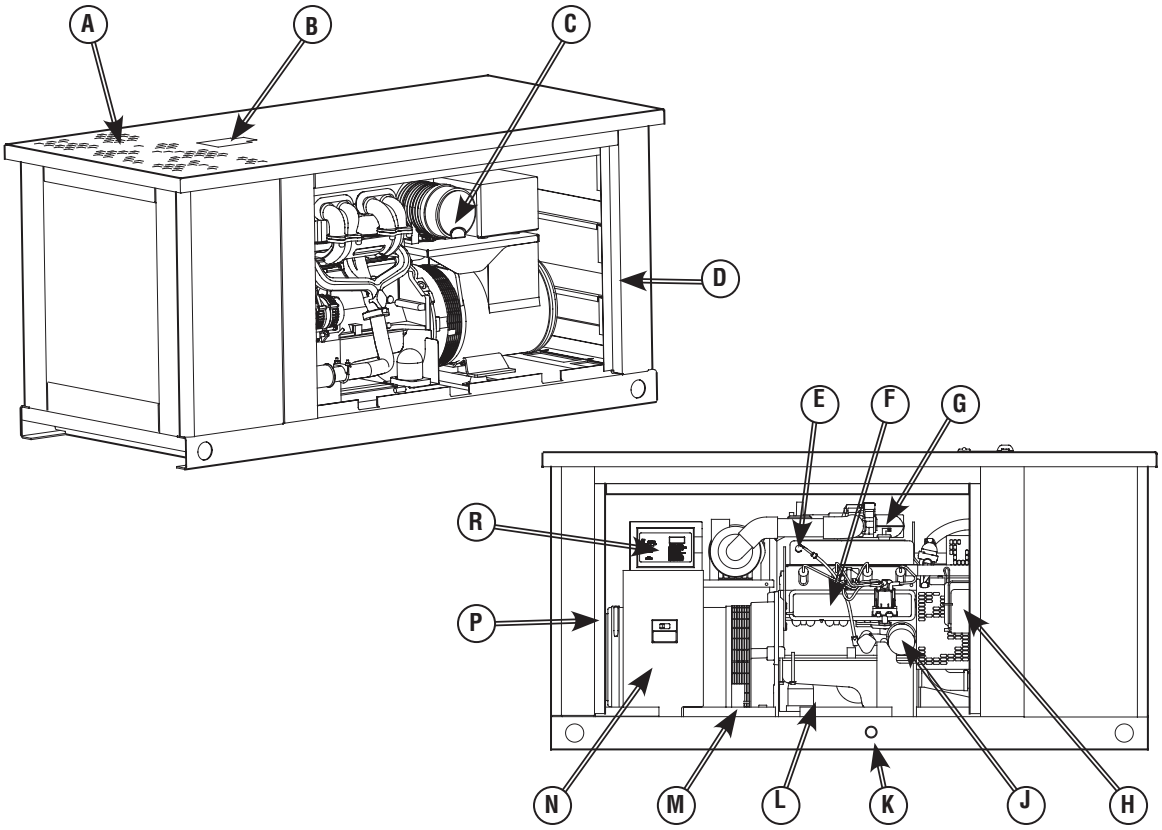
To be supplied by Installer:

- Connecting wire and conduit
- Fuel supply valves/plumbing
- Various specialty tools/equipment

Features and Controls

30 kW Residential Generator

Read this Operator's Manual and *Important Safety Instructions* before operating your generator. Compare the illustrations of this 30kW model with your generator to familiarize yourself with the locations of various controls and adjustments. **Save this manual for future reference.**



Generator is pictured with access doors removed for clarity

A - Exhaust Port — High-performance muffler lowers engine noise to comply with most residential codes.

B - Coolant Fill Door — Provides access for servicing engine with oil and coolant.

C - Air Cleaner — Protects engine by filtering dust and debris out of intake air.

D - Battery Door opening — Provides access to starting battery and air cleaner.

E - Oil Dip Stick — Used to check the engine oil level.

F - Engine Label — Identifies engine model and type.

G - Oil Fill Cap — Remove to service the engine with recommended oil.

H - Coolant Recovery Bottle — Provides visual indicator of engine coolant level.

J - Oil Filter — Filters engine oil to prolong system life.

K - Fuel Inlet — Fuel supply is connected here.

L - Oil Drain Hose — Provided to facilitate oil changing.

M - ID Label (located on base) — Identifies unit by serial number.

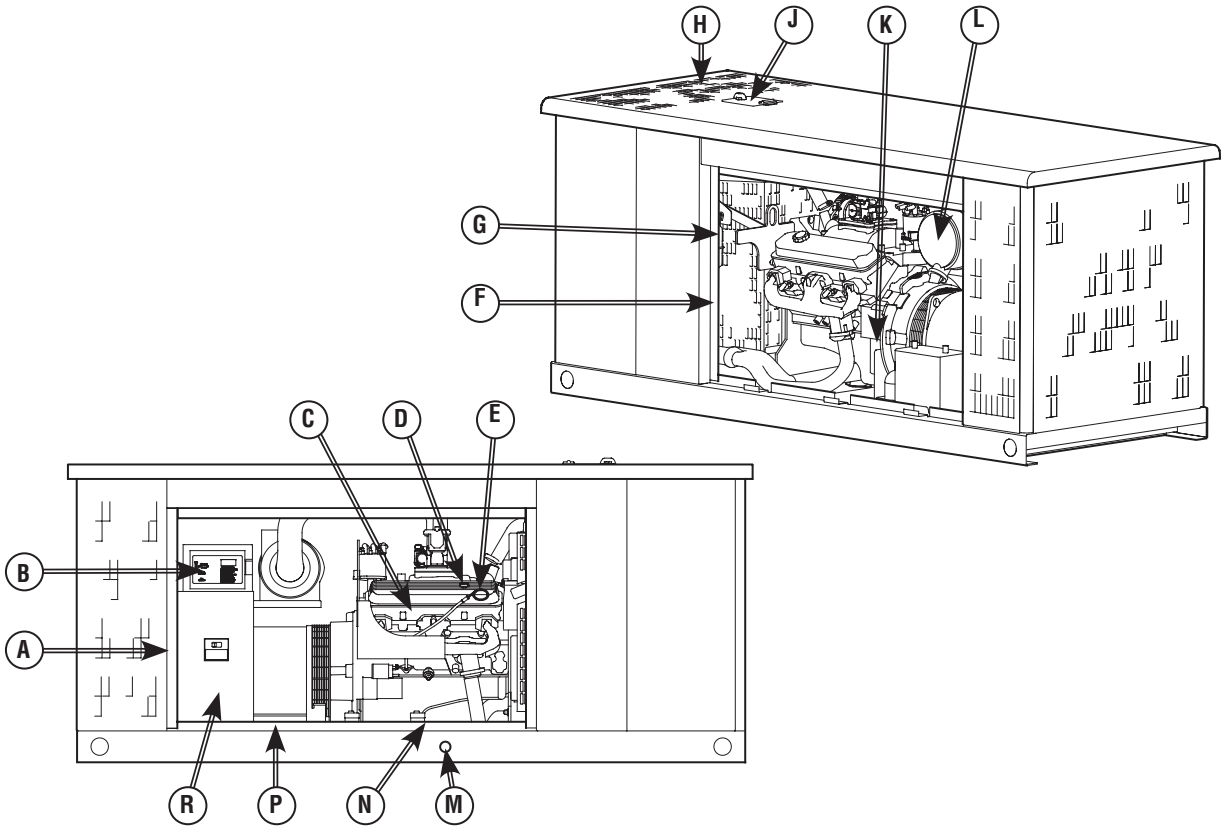
N - Circuit Breaker Enclosure - Equipped with removable bottom to assist with conduit connection.

P - Control Panel Door opening — Provides access to control panel, oil filter, etc. (may be two doors)

R - Control Panel — Used for various test, operation and maintenance functions. See *System Control Panel*.

45 kW Home Generator

Compare the illustrations of this 45kW model with your generator to familiarize yourself with the locations of various controls and adjustments. **Save this manual for future reference.**



Generator is pictured with access doors removed for clarity

A - Control Panel Door opening — Provides access to control panel (may be two doors).

B - Control Panel — Used for various test, operation and maintenance functions. See *System Control Panel*.

C - Engine Label — Identifies engine model and type.

D - Oil Fill Cap — Remove to service the engine with recommended oil.

E - Oil Dip Stick — Used to check the engine oil level.

F - Battery Door opening — Provides access to starting battery, air cleaner, oil filter, etc.

G - Coolant Recovery Bottle — Provides visual indicator of engine coolant level.

H - Exhaust Port — High-performance muffler lowers engine noise to comply with most residential codes.

J - Coolant Fill Door — Provides access for servicing engine with oil and coolant.

K - Oil Filter — Filters engine oil to prolong system life.

L - Air Cleaner — Protects engine by filtering dust and debris out of intake air.

M - Fuel Inlet — Fuel supply is connected here.

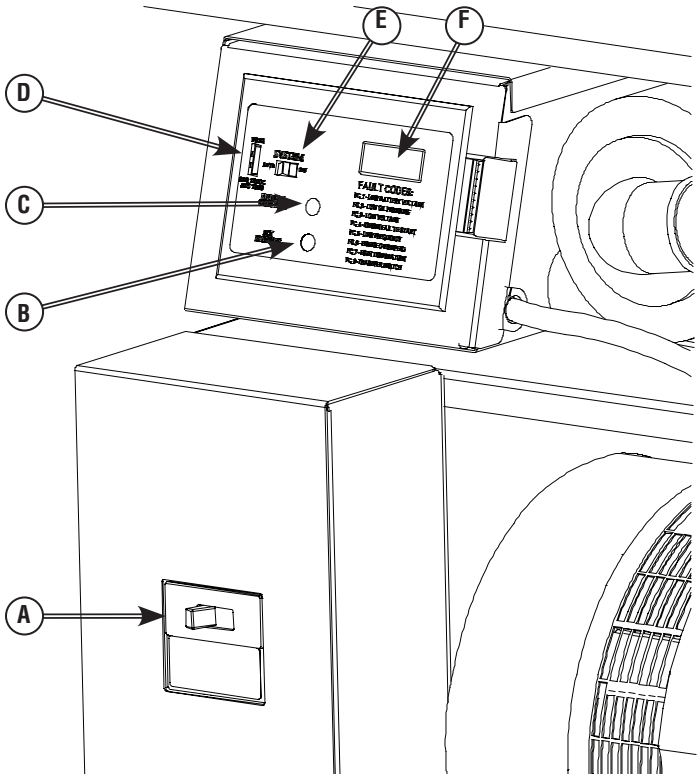
N - Oil Drain Hose — Provided to facilitate oil changing.

P - ID Label (located on base) — Identifies unit by serial number.

R - Circuit Breaker Enclosure - Equipped with removable bottom to assist with conduit connection.

System Control Panel

Compare this Control Panel illustration with your generator to familiarize yourself with the location of these important controls:



A - Circuit Breaker — Protects the system from shorts and other over-current conditions. Must be **ON** to supply power to the Automatic Transfer Switch.

B - Set Exercise Button — Used to set the exercise cycle start time. Exercise cycle only occurs in **AUTO** mode.

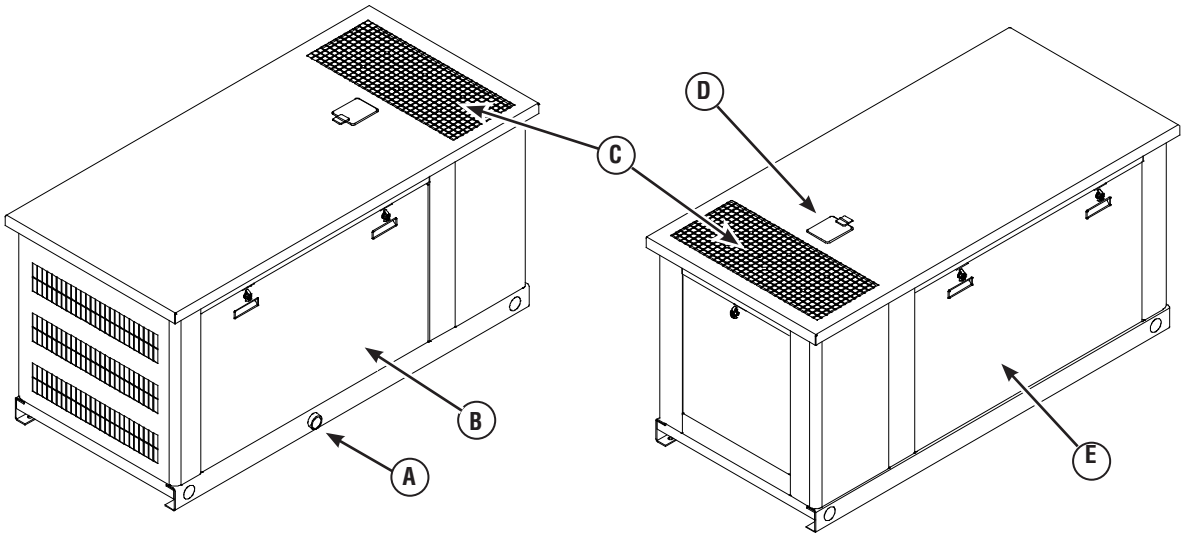
C - Manual Over-Ride Button — With system switch in **AUTO** position, push the manual over-ride button for six seconds to start the generator. To turn off the generator, push and hold the manual over-ride button until engine stops.

D - 15 Amp Fuse — Protects the system DC control circuits. If the fuse has 'blown' (melted open) or was removed, the engine cannot crank or start. Replace the fuse using only an identical ATO 15A fuse.

E - System Switch — This two-position switch is the most important control on the system and is used as follows:

- "**AUTO**" position is the normal operating position. If a utility power outage is sensed, the system will start the generator. When utility power is restored, AUTO lets the engine stabilize internal temperatures, shuts off the generator, and waits for the next utility power outage.
- "**OFF**" position turns off running generator, prevents unit from starting and resets any detected faults.

F - Digital Display — Displays the total number of hours the generator has been running and fault codes. Used to schedule maintenance tasks and for troubleshooting operational problems with the residential generator. All fault conditions are described in *Fault Detection System*.



Access Doors

The residential generator is equipped with an enclosure that has several access doors, as shown above. The doors are named for a significant component located behind them:

A - Fuel Inlet port (shown for reference)

B - Control Panel door

C - Exhaust opening (shown for reference)

D - Coolant Fill door

E - Battery door

⚠ WARNING

Contact with muffler area can result in serious burns.

- DO NOT touch hot parts and AVOID hot exhaust gases.
- Allow equipment to cool before touching.

The enclosure also includes muffler and radiator access panels, used for cleaning those components. Those panels should remain closed at all other times.

Each residential generator is equipped with two identical keys. These keys fit the locks that secure the access doors.

To Open an Access Door:

1. Insert key into lock of access door handle you wish to open and turn key one quarter turn counterclockwise. Remove key. Handle will remain unlocked until you re-lock it.
2. Grasp door's handle and turn one quarter turn counterclockwise to open.
3. Coolant Fill door is unlocked in the same manner. It can be used for adding coolant or engine oil.

To Close an Access Door:

1. Close door and turn handle one quarter turn clockwise.
2. Insert key into lock in handle and turn key one quarter turn clockwise. Remove key.

NOTE: The Coolant Fill, Battery and Control Panel doors must be installed whenever the unit is running.

Operation

Important Owner's Considerations

Engine Oil

NOTICE
Any attempt to crank or start the engine before it has been properly serviced with the recommended coolant or oil will result in equipment failure.
• Refer to *Maintenance* in the Operator's Manual and engine manual for coolant and oil fill information. • Damage to equipment resulting from failure to follow this instruction will void engine and generator warranty.

This engine is shipped from the factory pre-run and filled with non-synthetic oil (API SL 10W-30W). This allows for system operation in a wide range of temperature and climate conditions. Before starting the engine, check oil level and ensure that engine is serviced as described in the engine operator's manual.

NOTE: The use of multi-grade oil does not alter the required oil change intervals described in the engine operator's manual.

Coolant System

This engine is shipped from the factory filled with a 50-50 mix of automotive (Dex-Cool™ orange) anti-freeze and water. This will provide optimum year round protection against freezing, boiling and corrosion. The coolant system incorporates a water heater that operates when ambient temperature is below 80ºF AND utility power is present at the transfer switch. Before starting the engine, check coolant level as described in the engine operator's manual.

Battery

The residential generator is supplied with a valve-regulated rechargeable 12 Volt battery. The battery cables are connected at the factory.

The battery may not be at full charge when installed. If battery voltage is below 12 volts, charge the battery. See *Battery* in *Maintenance* in the operator's manual for details.

⚠ WARNING
Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

With the battery installed, all wiring to transfer switch and home generator completed, utility power supplied to the automatic transfer switch, and the unit in **AUTO** mode, the battery receives a trickle charge while the engine is not running. The trickle charge cannot be used to recharge a battery that is completely discharged.

15 Amp Fuse

The generator's 15 Amp fuse is critical to correct system operation. The unit's 15 Amp fuse has been removed from the control panel to prevent the unit from starting in transit. Your installer will ensure the fuse is properly installed upon completion of the installation.

Automatic Operation

To select automatic operation, do the following:

1. Confirm 15 Amp fuse is installed in control panel.
2. Set the main distribution panel circuit breaker that sends utility voltage to the transfer switch to **ON**.
3. Set the generator's main circuit breaker to its **ON** position.
4. Set the control panel system switch to **AUTO**.

⚠ CAUTION	
	With the system switch set to **AUTO**, the engine may crank and start at any time without warning.
• To prevent possible injury that may be caused by such sudden starts, always set the system switch to **OFF** if performing maintenance on the system. • Remove the 15 Amp fuse before working on or around the generator or transfer switch.	

Checking Automatic Operation

To check the system for proper automatic operation, proceed as follows:

1. Turn **OFF** main distribution panel circuit breaker sending power to automatic transfer switch.

   The engine will crank and start when utility voltage is lost and the sensor has timed out. Let the system go through its entire automatic operation sequence.
2. With generator output supplying its loads, turn **ON** main distribution panel circuit breaker that supplies utility power to Automatic Transfer Switch.
3. The automatic transfer switch will transfer loads back to utility power after 5 minute minimum run time and utility is restored.
4. The generator will run for an additional one minute for engine cool down, then shut down.

NOTE: If utility is restored and generator does not shut down after 10 minutes, set system switch to **OFF** and contact your installer or local service center.

This completes the test procedures for automatic operation. The residential generator will now start automatically and will supply power to the transfer switch when utility power is lost.

Setting Exercise Timer

The residential generator is equipped with an exercise timer that will start and exercise the system once every seven days. During this exercise period, the unit runs for approximately 20 minutes and then shuts down. Electrical load transfer DOES NOT occur during the exercise cycle (unless an utility power outage occurs).

A button on the control panel is labeled “Set Exercise” (see *System Control Panel*). The specific day and the specific time of day this button is pressed is programmed into the control board memory. This date and time is then used to automatically initiate the system exercise cycle. The “SET EXERCISE” legend on the control panel will flash until the set exercise cycle is set.

To perform the Set Exercise procedure:

1. Choose the day and time you want your residential generator to exercise.
2. On that day and time, press and hold down the “Set Exercise” button for three seconds.

   NOTE: “SET EXERCISE” will flash until the button is pressed for three seconds, then “SET EXERCISE” will illuminate for 5 seconds, and finally turn off.
3. The unit will then start and run it’s 20 minute exercise cycle.

For example, if you press the “Set Exercise” button on Sunday morning at 10:00 AM, the unit will run an immediate exercise cycle and an exercise cycle every following Sunday at 10:00 AM (+/- 1/2 hour).

NOTE: “Set Exercise” will only work if the unit is in the **AUTO** mode and this exact procedure is followed. The exerciser will need to be re-set if the 15 Amp fuse is removed or changed, or if the 12 Volt DC battery is disconnected.

If you want to change the day and time the unit exercises, simply perform the “Set Exercise” procedure at the exact weekday and time you want it to take place.

Maintenance

Servicing the System

To service the residential generator system:

1. Remove 15 Amp fuse from control panel.
2. Set control panel system switch to **OFF**.
3. Set the generator’s main circuit breaker to its **OFF** position.
4. Utility voltage is present. Disconnect power before servicing by removing the two fuses from the transfer switch.

Fault Detection System

The generator may have to run for long periods of time with no operator present. For that reason, the system is equipped with sensors that automatically shut down the generator in the event of potentially damaging conditions, such as low oil pressure, high temperature, over speed, and other conditions.

The generator’s control panel has a digital display that shows fault codes, like “FC_1”. The table below lists the detected fault, the fault code as displayed on the control panel, and the number of LED flashes (also described as ‘blinks’) seen on the remote LED indicator.

Fault Description	Fault Codes	LED Flashes
Low battery voltage	FC_1	1
Low oil pressure	FC_2	2
Low voltage	FC_3	3
Engine fails to start	FC_4	4
Low frequency	FC_5	5
Engine overspeed	FC_6	6
High temperature	FC_7	7
Transfer switch fault	FC_8	8

The remote LED indicator is installed at a convenient inside location. The LED will remain lit when the generator is in AUTO. Should a system fault be detected, the LED will turn on and off in a series of blinks that identify the problem. The blink pattern is repeated with a brief pause between each series of blinks.

Reset Fault Detection System

The operator must reset the fault detection system each time it activates. To do so, place the control panel System switch in the **OFF** position for 5 seconds or more. Remedy the fault condition, then return the residential generator to service by placing the system switch in the **AUTO** position, installing the 15 Amp fuse, and resetting the exercise timer. See *Setting Exercise Timer* in *Operation*.

A description of each fault and suggested remedies are as follows:

No LED - Discharged Battery

If there is a detected fault condition but the LED is not blinking, this is because the battery is completely discharged. To remedy the problem, remove the 15 Amp fuse and disconnect the battery from the generator. Take the battery to a local battery store for analysis. Replace the battery after it has been fully recharged, connecting the NEGATIVE cable last. Then install the 15 Amp fuse in the control panel.

NOTE: With the battery installed, all wiring to transfer switch and residential generator completed, utility power supplied to the Automatic Transfer Switch, and the unit in AUTO mode, the battery receives a trickle charge while the engine is not running. The trickle charge is not able to recharge a battery that is completely discharged. See *Battery* in *Maintenance*.

Low Battery Voltage (FC_1)

This fault is indicated by fault code FC_1 and one blink on the LED indicator. This condition occurs if the generator cannot start because the starting battery output power is below that needed to crank the engine. Causes for this problem may be a faulty battery or battery charge circuit.

To remedy the problem, contact your local service center to check the battery charge output. Remove the 15 Amp fuse and disconnect the battery from the generator. Take the battery to a local battery store for analysis.

Replace the battery after it has been fully recharged, connecting the NEGATIVE cable last. Then install the 15 Amp fuse in control panel and reset exercise timer. See *Setting Exercise Timer* in *Operation*.

Low Oil Pressure (FC_2)

This fault is indicated by fault code FC_2 and two blinks on the remote LED indicator. The unit is equipped with an oil pressure switch that uses normally closed contacts held open by engine oil pressure during operation. Should oil pressure drop below the 8 psi range, switch contacts close and the engine is shut down.

To remedy the low oil pressure condition, add the recommended oil to the FULL mark on the dipstick.

If the low oil pressure condition still exists, the engine will start, then shut down again. The fault code will appear and the LED will flash. In this case, contact an Authorized Dealer.

Low Voltage (Generator, FC_3)

This fault is indicated by fault code FC_3 and three blinks on the LED indicator. This condition is caused by a restriction in the fuel flow, a broken or disconnected signal lead, a failed alternator winding, the control panel circuit breaker is open, or the generator is overloaded.

To remedy the problem, contact your installer or an Authorized Dealer.

Engine Fail To Start (FC_4)

This fault is indicated by fault code FC_4 and four blinks on the LED indicator. This feature prevents the generator from damaging itself if it continually attempts to start in spite of another problem, such as no fuel supply. Each time the system is directed to start, the unit will crank for 10 seconds, pause for 10 seconds, and repeat. If the system does not begin producing electricity after approximately 2 minutes, the unit will stop cranking and the LED will blink.

Check to make sure the generator's main circuit breaker is in the **ON** position in order for the sensing leads to verify that the unit is running.

The most likely cause of this problem is no fuel supply. Check the internal and external fuel shut off valves to ensure they are fully open. Other causes could be failed spark plug(s), failed engine ignition, or the engine air filter is clogged. You may need to contact your installer for assistance if you can't remedy these problems.

Low Frequency (FC_5)

This fault is indicated by fault code FC_5 and five blinks on the LED indicator. This feature protects devices connected to the transfer switch by shutting the generator down if the engine runs slower than 55 Hz for three seconds. This condition is caused by a failed engine component or by excessive loads on the generator. To remedy the problem, contact your installer or an Authorized Dealer.

Engine Overspeed (FC_6)

This fault is indicated by fault code FC_6 and six blinks on the LED indicator. This feature protects devices connected to the transfer switch by shutting the generator down if the engine happens to run faster than the preset limit. The overspeed fault is detected as follows:

- If the generator output frequency is 65-70 Hz, after three seconds, the generator will shut down.
- If the generator output frequency is greater than 70 Hz, the generator will shut down immediately.

This condition is caused by a failed engine component. To remedy the problem, contact your installer or an Authorized Dealer.

High Temperature (FC_7)

This fault is indicated by fault code FC_7 and seven blinks on the LED indicator. The contacts of the coolant temperature switch are normally open. If the engine coolant temperature exceeds approximately 115.5°C (240°F), the fault is detected and the engine shuts down.

Common causes for this condition include running the unit with all access doors removed, obstructed air inlet or exhaust port, low oil or coolant level, or debris in the engine compartment or radiator.

To resolve the problem, let the engine cool down and remove any accumulated debris and obstructions. Ensure that the access doors are installed whenever the unit is running.

Transfer Switch Fault (FC_8)

This fault is indicated by fault code FC_8 and eight blinks on the LED indicator (if transfer switch is equipped with fault detection). The most likely cause of this fault is a blown fuse in the transfer switch.

To remedy the problem, contact your installer or an Authorized Dealer.

Generator Maintenance

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

All adjustments should be made at least once each season. Follow the requirements in the operator's manual.

Generator maintenance consists of keeping the unit clean. Operate the unit in an environment where it will not be exposed to excessive dust, dirt, moisture or any corrosive vapors. Cooling air louvers on the enclosure must not become clogged with snow, leaves, or any other foreign material.

Check the cleanliness of the unit frequently and clean when dust, dirt, oil, moisture or other foreign substances are visible on its exterior/interior surface.

NOTE: DO NOT use direct spray from a garden hose to clean generator. Water can enter the engine and generator and cause problems.

Engine Maintenance

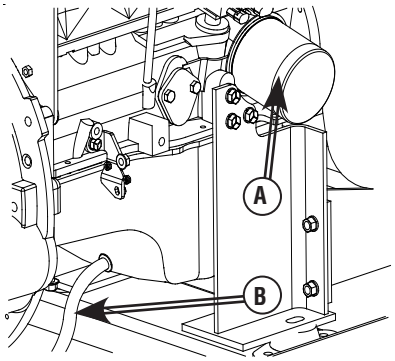
An engine manual was packaged with this system. Please refer there for all engine-related maintenance topics. However, proper engine cooling and lubrication are so important we give them special mention here.

Engine Oil

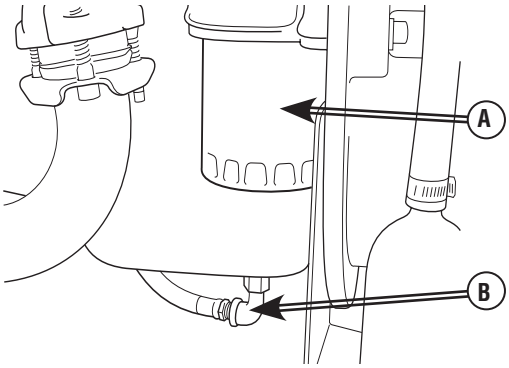
The system is filled with the recommended non-synthetic oil (API SL 10W-30W). This allows for system operation in a wide range of temperature and climate conditions.

NOTE: Refer to the engine operator's manual for recommended oil change intervals.

Shown here is the oil drain hose (**B**) and the oil filter location (**A**) for the 30kW generator:



Shown here is the oil drain hose (**B**) and the oil filter location (**A**) for the 45kW generator:



Changing Engine Oil

⚠ CAUTION

Avoid prolonged or repeated skin contact with used motor oil.

- Used motor oil has been shown to cause skin cancer in certain laboratory animals.
- Thoroughly wash exposed areas with soap and water.

KEEP OUT OF REACH OF CHILDREN. DON'T POLLUTE. CONSERVE RESOURCES. RETURN USED OIL TO COLLECTION CENTERS.

1. Confirm 15 Amp fuse is removed from control panel.
2. Place oil drain hose into an approved container.
3. Remove brass fitting from end of drain hose.

NOTE: Change oil while the engine is still warm from running, as described in the engine operator's manual.

NOTICE

Any attempt to crank or start the engine before it has been properly serviced with the recommended oil will result in equipment failure.

- Refer to *Maintenance* and engine manual for oil fill information.
- Damage to equipment resulting from failure to follow this instruction will void engine and generator warranty.

4. When oil has drained, replace brass fitting on hose.
5. If all engine servicing is complete, replace 15 Amp fuse in control panel and reset exercise timer. See *Setting Exercise Timer* in *Operation*.

To fill your engine with oil:

Follow the oil grade recommendation and oil fill instructions given in the engine operator's manual.

To make the task of adding oil more convenient, we recommend use of a funnel attached to a length of tubing long enough to reach from the Coolant Fill door to the oil fill opening on the engine valve cover.

Engine Coolant System

With the engine cold, check the coolant level in the coolant reservoir, seen inside the Control Panel door. Maintenance instructions for engine coolant are found in the engine operator's manual.

Battery

Servicing of batteries are to be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries.

⚠ WARNING

Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

Servicing the Battery

If it is necessary to service the battery, proceed as follows:

1. Open "Control Panel" access door.
2. Set generator's system switch to **OFF**.
3. Remove 15 Amp fuse from control panel.
4. Service or replace battery as required.
5. Connect red battery cable to battery positive terminal (indicated by **POSITIVE**, **POS**, or (**+**)).
6. Connect negative battery cable to negative battery terminal (indicated by **NEGATIVE**, **NEG**, or (**-**).
7. Ensure hardware on both positive and negative battery terminals is secure.
8. Reinstall 15 Amp fuse in control panel.
9. Set generator's system switch to **AUTO**.
10. Reset exercise timer. See *Setting Exercise Timer*.
11. Close "Control Panel" access door.

DON'T POLLUTE. CONSERVE RESOURCES, RETURN USED BATTERY TO RECYCLING COLLECTION CENTER.

Charging the Battery

If it is necessary to charge the battery, proceed as follows:

1. Set generator's system switch to **OFF**.
2. Remove 15 Amp fuse from control panel.
3. Disconnect negative battery cable from negative battery terminal (indicated by **NEGATIVE**, **NEG**, or (**-**).

NOTICE

Failure to disconnect negative battery cable will result in equipment failure.

- DO NOT attempt to jump start the battery.
- Damage to equipment resulting from failure to follow this instruction will void warranty.

4. Charge battery with battery charger at 2 Amps until battery holds 12 Volts.

NOTE: DO NOT exceed 13.7 volts when charging.

⚠ WARNING

Storage batteries give off explosive hydrogen gas during recharging.

Slightest spark will ignite hydrogen and cause explosion.

Battery electrolyte fluid contains acid and is extremely caustic.

Contact with battery contents will cause severe chemical burns.

A battery presents a risk of electrical shock and high short circuit current.

- DO NOT dispose of battery in a fire. Recycle battery.
- DO NOT allow any open flame, spark, heat, or lit cigarette during and for several minutes after charging a battery.
- DO NOT open or mutilate the battery.
- Wear protective goggles, rubber apron, rubber boots and rubber gloves.
- Remove watches, rings, or other metal objects.
- Use tools with insulated handles.

NOTE: With the battery installed and utility power available to the transfer switch, the battery receives a trickle charge whenever the engine is not running. It may take up to 72 hours to fully charge a battery with the trickle charge. The trickle charge is not able to recharge a battery that is completely discharged.

5. Connect negative battery cable to negative battery terminal (indicated by **NEGATIVE**, **NEG**, or (**-**)).
6. Ensure hardware on both positive and negative battery terminals is secure.
7. Reinstall 15 Amp fuse in control panel.

⚠ CAUTION

With the system switch set to **AUTO**, the engine may crank and start at any time without warning.

- To prevent possible injury that may be caused by such sudden starts, always set the system switch to **OFF** if performing maintenance on the system.
- Remove the 15 Amp fuse before working on or around the generator or transfer switch.

8. Set generator's system switch to **AUTO**.
9. Reset exercise timer. See *Setting Exercise Timer*.

To Clean the Generator

NOTICE

Improper treatment of generator can damage it and shorten its life.

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

1. Set control board system switch to OFF.
2. Remove 15 Amp fuse from control panel.
3. Clean generator as desired.
   - Use a damp cloth to wipe exterior surfaces clean.
   - Use a soft, bristle brush to loosen caked on dirt, etc.
   - Use a vacuum cleaner to pick up loose dirt and debris.
   - Use low pressure air (not to exceed 25 psi) to blow away dirt. Inspect cooling air slots and openings on the generator. These openings must be kept clean and unobstructed.
4. Reinstall 15 Amp fuse in control panel.
5. Set generator's system switch to AUTO.
6. Reset exercise timer. See *Setting Exercise Timer*.
7. Close access doors.

When Calling For Assistance

You must have the following information at hand if it is necessary to contact a local service center regarding service or repair of this unit:

1. Obtain the unit Model Number and Serial Number from the unit ID label. See *Controls* for location of the label or refer to the information recorded on the inside front cover of the Installation Manual.
2. Obtain the engine identification numbers from the engine label. See the engine operator's manual for location of this information. Please note that several different engines are described in the engine manual, so your engine may vary from that shown.

Storage

The residential generator system is designed for long term service as a backup generator. As such, there is no need to take any storage precautions. However, if it becomes necessary to take the system out of service for an extended period, call Technical Services at **(877) 369-9400**, between 8:00 AM and 5:00 PM CT for specific recommendations. Refer to the engine operator's manual for further information

Troubleshooting

Problem	Cause	Correction
Engine is running, but no AC output is available.	1. Circuit breaker open or defective. 2. Fault in generator control panel. 3. Poor wiring connections or defective transfer switch.	1. Reset or replace circuit breaker. 2. Contact local service facility. 3. Check and repair.
Engine runs good at no-load but "bogs down" when loads are connected.	1. Short circuit in a connected load. 2. Generator is overloaded. 3. Shorted generator circuit. 4. Fuel pressure or mixture is incorrect. 5. Kinked fuel line.	1. Disconnect shorted electrical load. 2. See *Essential Circuits*. 3. Contact local service facility. 4. See *Gaseous Fuel System* in the Installation Manual. 5. Remove kink. Replace if necessary.
Engine will not start; or starts and runs rough.	1. 15 Amp fuse missing or blown. 2. Fuel supply turned off or depleted. 3. Failed battery. 4. Fuel pressure is incorrect	1. Install (new) 15 Amp fuse. See *System Control Panel*. 2. Open fuel valve(s); check propane tank. 3. Replace battery. 4. See *Gaseous Fuel System* in the Installation Manual.
Engine shuts down during operation.	1. Fuel supply turned off or depleted. 2. Fault indicator blinking.	1. Check fuel valves, fill propane tank. 2. Count blinks and refer to *Fault Detection System*.
Loss of power on essential circuits.	1. Generator circuit breaker is open. 2. Transfer switch problems.	1. Reset circuit breaker. 2. See the transfer switch manual.

PROTECH™ Residential Standby Generators

Models: **GEN27WN GEN30WL GEN42WN GEN45WL**

SCOPE of WARRANTY:

- This Limited Warranty provides that a replacement will be furnished for any part of the product which fails in normal use and service during the Warranty Period specified, in accordance with the warranty's terms. The replacement part is warranted for only the unexpired portion of the original Warranty Period.

EXCEPTIONS:

- Units installed as prime power source are not covered.
- Installations for the purpose of life support situations are not covered.
- Rental use applications are not covered

EFFECTIVE DATE of WARRANTY COVERAGE:

The Effective Date is the date of installation if properly documented; otherwise it is the date of manufacture plus six (6) months.

WARRANTY PERIODS

Residential Use:

- The **GEN27WN GEN30WL GEN42WN GEN45WL** Residential Standby Generators are warranted for a Warranty period of four (4) Years or 2000 operating hours, whichever occurs first.
- The **Engine** warranty is provided by the manufacturer. Refer to the engine manual.

Commercial Use:

- The **GEN27WN, GEN30WL, GEN42WN** and **GEN45WL** Generators are warranted for a period of Two (2) years or 1000 operating hours, whichever occurs first when used in commercial applications.

STANDARD PROVISIONS and CONDITIONS:

EXCLUSIONS - THIS WARRANTY WILL NOT APPLY: a) to damages, malfunctions or failures resulting from failure to properly install, operate or maintain the unit in accordance with the manufacturer's instructions provided; b) to damages, malfunctions or failures resulting from abuse, accident, fire, flood and the like; c) to parts used in connection with normal maintenance, such as adjustments, fuel system cleaning and obstruction due to chemical, dirt, carbon, lime and so forth; d) to units which are not installed in the United States of America or Canada; e) to units which are not installed in accordance with applicable local codes, ordinances and good trade practices; f) to damages, malfunctions or failures caused by the use of any attachment, accessory or component not authorized by the manufacturer; g) to wear items such as oil gauges, o-rings, filters fuses, or spark plugs etc.

ADDITIONAL EXCLUSIONS UNDER COMMERCIAL APPLICATION:

1. Wear items such as engine oil, oil gauges, o-rings, filters, fuses, spark plugs, anti-freeze, starting batteries, etc., or damage or malfunctions resulting from accidents, freezing, abuse, modifications, alterations, or improper servicing or chemical deterioration
2. Any costs for adjustments, loose or leaking clamps or connections, installation or start-up operations fuel system cleaning and obstruction (due to chemical, dirt, carbon, lime, and so forth) and any failures caused by contaminated fuels, anti-freeze or oil, etc.
3. Units sold for primary power applications as defined by the U.S. & Canadian National Electric Codes, whether utility power exists or where utility power does not normally exist
4. Used, reconditioned, and demonstration equipment and any equipment used in life support applications.
5. Bodily injuries including death which results from product's failure.
6. Accessory parts.
7. Any loss of revenue that is a direct or indirect result of the failure of this unit.
8. Failures caused by force majeure events beyond the manufacturer's control or acts of God such as, but not limited to freezing, theft, fire, collision, wars or riots, vandalism, lightning, earth quake wind storm, hail, volcanic eruption, water or flood damage, tornados, hurricanes, terrorist acts or nuclear holocaust.
9. Any incidental, consequential or indirect damages caused by defects in materials or workmanship or any delay in repair of replacement of the defective part(s).
10. Failure due to misapplication or misrepresentation.
11. Telephone, satellite, facsimile, cell phone, internet or any other communication expenses.
12. Overtime, holiday or emergency labor expenses.
13. Any mode of transportation deemed as abnormal in our judgment such as planes, ferries, railroad, buses, helicopters, snowmobiles, snow-cats, off-road vehicles, etc.
14. Any and all expenses incurred investigating performance complaints unless defective Briggs & Stratton materials and/or workmanship were the direct cause of the problem.
15. Overnight freight costs for replacement parts.
16. Other rental equipment used while warranty repairs are being performed (i.e., generators, material handling equipment, etc.)

SHIPPING COSTS: This Warranty does NOT cover shipping costs. You will be responsible for the cost of shipping warranty replacement parts from our factory to our distributor and from the distributor to the location of your product. You also are responsible for any shipping cost of returning the failed part to the distributor.

SERVICE LABOR RESPONSIBILITY: This Warranty does NOT cover any labor expenses for service, NOR for removing or reinstalling parts. All such expenses are your responsibility, unless a service labor agreement exists between you and your contractor.

HOW TO OBTAIN WARRANTY PERFORMANCE: You must promptly report any failure covered by this warranty to the installing contractor or distributor. Normally, the installing contractor from whom the unit was purchased will be able to take the necessary corrective action by obtaining through his distributor any replacement parts. If the contractor is not available, simply contact any other local contractor handling RHEEM, RUUD or PROTECH air conditioning products. The name and location of a local contractor can usually be found in your telephone directory or by contacting a RHEEM, RUUD or PROTECH air conditioning distributor. If necessary, the following office can advise you of the nearest distributor:

4744 Island Ford Road, Randleman, NC 27317

HOWEVER, ANY REPLACEMENTS ARE MADE SUBJECT TO VALIDATION OF IN-WARRANTY COVERAGE. An item to be replaced must be made available in exchange for the replacement.

Limited Warranty:

There is no other expressed warranty. Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one year from purchase, or to the extent permitted by law and all implied warranties are excluded. Liability for incidental or consequential damages are excluded to the extent exclusion is permitted by law. Some state or countries do not allow limitations on how long an implied warranty lasts, and some states or countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state and country to country. 207959E, Rev. -, 7/28/2008

RHEEM SALES COMPANY
Randleman NC

"In the spirit of continuous improvement, we reserve the right to make changes without notice."

Reserved

Product Specifications

30 kW

Rated Maximum Load Current at 77°F (25°C)
Using natural gas:
120 Volts Output . . . . . .225 Amps
240 Volts Output . . . . . 112.5 Amps
Using LP vapor:
at 120 Volts . . . . . .250 Amps
at 240 Volts . . . . . .125 Amps
Rated AC Voltage . . . . . .120/240 Volts
Phase . . . . . .Single phase
Rated Frequency . . . . . 60 Hertz
Normal Operating Range . . -20°F (-28.8°C) to 104°F (40°C)
Output Sound Level . 65 dB(A) at 23 ft. (7 m) at normal load
Shipping Weight . . . . . 1700 lb (771 kg)

45 kW

Rated Maximum Load Current at 77°F (25°C)
Using natural gas or LP vapor:
at 120 Volts . . . . . .375 Amps
at 240 Volts . . . . . 187.5 Amps
Rated AC Voltage . . . . . .120/240 Volts
Phase . . . . . .Single phase
Rated Frequency . . . . . 60 Hertz
Normal Operating Range . . -20°F (-28.8°C) to 104°F (40°C)
Output Sound Level . 65 dB(A) at 23 ft. (7 m) at normal load
Shipping Weight . . . . . 2075 lb (941 kg)

This generator is rated in accordance with UL (Underwriters Laboratories) 2200 (stationary engine generator assemblies) and CSA (Canadian Standards Association) standard C22.2 No. 100-04 (motors and generators).

Rheem Sales Company

Randleman, NC 27317

(877) 369-9400