Energizer®

EZV SERIES
USER GUIDE

Energizer®

Warning: The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

CAN ICES-3 (B)/NMB-3(B)

EZV_UG_EN_2016-03-30

Thanks for choosing the EZV Series!

You're excited to power up, so we'll keep this brief. Let's get started!

THIS PRODUCT MEETS ALL CERTIFICATION REQUIREMENTS FROM:

239054

WE'VE GOT YOU COVERED!

Contact us by phone at 1-877-528-3772,
email us at support@energizergenerators.com,
or visit us online at www.energizergenerators.com.

IMPORTANT SAFETY INSTRUCTIONS.

This user guide contains important instructions for your product, that should be followed during installation and mainteneance of the generator and batteries.

SAVE THESE INSTRUCTIONS.

This user guide covers the safety, operation and maintenance procedures for the EZV2200 and EZV2800.

All information in this publication is based on the latest product information available at the time of print.

Visit www.energizergenerators.com for user guide updates and operation notices.

WARRANTY INFORMATION

YOU CAN REGISTER EASILY USING OUR ONLINE FORM:
www.energizergenerators.com

See page 36 for more information.

Product registration will allow you to request warranty support in the future. Product registration is required for all product support and warranty coverage.

Warranty support, operation assistance and product support is provided by Midland Power Inc., a licensed manufacturer of Energizer Generators. Please contact us directly for any warranty service questions.

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www.energizergenerators.com

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Chapter 1 — Safety First

Playing it safe when working with power equipment is always a good idea. Here are some important precautions to make sure you stay safe.

1.1 Safety while Operating Your Generator

- Always perform an oil, fuel and air filter check before starting the engine.
- Properly clean and maintain the equipment.
- Operate the generator according to instructions for safe and dependable service.
- Before operating the generator, read the user guide carefully. Otherwise, it may result in personal injuries or equipment damage.
- Never run the generator in an enclosed area to avoid harm from exhaust emissions of a poisonous carbon monoxide gas.
- The engine exhaust from this product contains chemicals known to cause cancer, birth defects or other reproductive harm.
- Be careful not to touch the exhaust system, compressor pump or discharge tubing during operation due to risk of burns.
- Pay attention to the warning labels. The engine exhaust system will become heated during operation and remain hot immediately after the engine is stopped.
- Gasoline is a highly flammable and explosive liquid. Refuel in a well ventilated area with the engine stopped.
- This portable generator is not for use with gasoline/ethanol blends with over 15% ethanol.
- When refueling the generator, keep it away from cigarettes, open flames, smoke and/or sparks.
- Place the generator at least 3 feet away from buildings or other equipment during operation.
- Run the generator on a level surface. Tilting the generator may result in fuel spills.
- Know how to stop the generator quickly and understand operation of all the controls. Never permit anyone to operate the generator without proper instructions.
- Keep children, pets and machinery with rotating parts away during

operation.

- Do not operate the generator in rain or snow.
- Do not allow any moisture to come in contact with the generator.
- Do not touch the spark plug while the engine is operating or shortly after the engine has been shut down

1.2 Understanding AC Safety

Before connecting the generator to an electrical device or power cord:

- Make sure that everything is in proper working order. Faulty devices or power cords can lead to an electrical shock.
- Turn off the generator immediately if the device begins to operate abnormally. Then disconnect the device and investigate the problem.
- Make sure that the electrical rating of the device does not exceed that of the generator. If the power level of the device is between the maximum output power and the running power of the generator, the generator should not be used for more than 30 minutes.
- WARNING: Connections for standby power to a building's electrical system must be done by a qualified electrician and must comply with all applicable laws and electrical codes (National Electrical Code, NFPA 70). Improper connections may cause serious injuries to electrical workers during a power outage, and when the utility power is restored, the generator may explode or cause fires. The generator shall be connected through transfer equipment that switches all conductors other than the equipment grounding conductor. The frame of the generator shall be connected to an approved grounding electrode.
- For power outages, permanently installed stationary generators are better suited for providing backup power to the home. Even a properly connected portable generator can become overloaded. This may result in overheating or stressing the generator components, possibly leading to a generator failure.

1.3 Safety while Maintaining Your Generator

- After any maintenance is performed, wash immediately using soap and clean water because repeated exposure to lubricant may cause skin irritation.

- Do not clean the filter element with flammable liquids like gasoline because an explosion may occur.
- Turn off the engine before performing any maintenance. Otherwise it can cause severe personal injury or death.
- Allow the generator set to cool down before performing any maintenance.
- Always wear safety glasses when cleaning the generator set with air.
- Do not clean the generator set with a pressure washer because it can cause damage to the generator set.
- Before working with batteries, ventilate the area, wear safety glasses, do not smoke and always disconnect the negative cable first and reconnect it last.
- Use rubber gloves when coming into contact with engine oil.
- Always stop the generator set before removing the oil filler cap.
- Only qualified maintenance personnel with knowledge of fuels, electricity, and machinery hazards should perform maintenance procedures.
- Lubricate all exposed metal parts regularly. See chapter 5.1 for maintenance schedule.

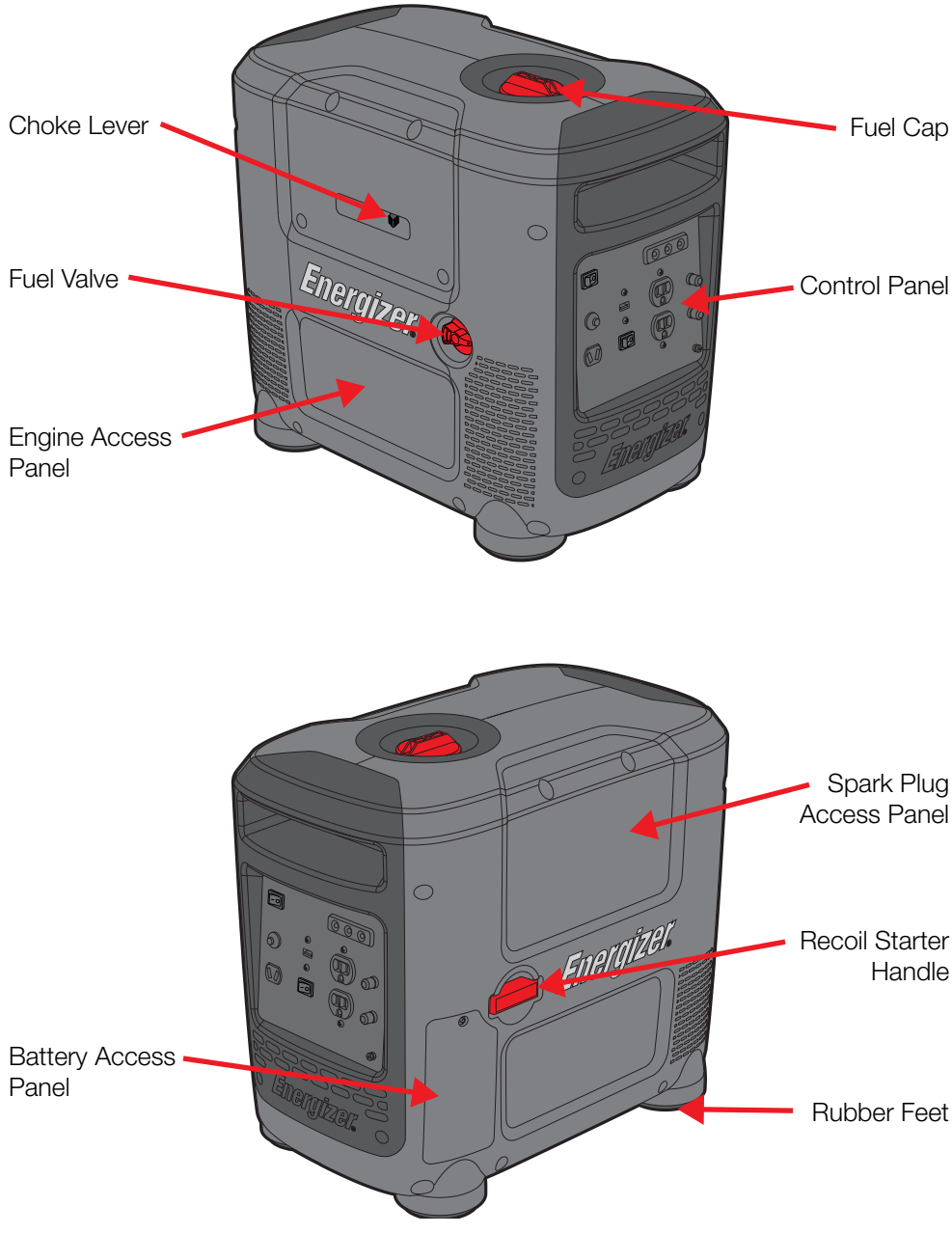
1.4 Other Safety Tips

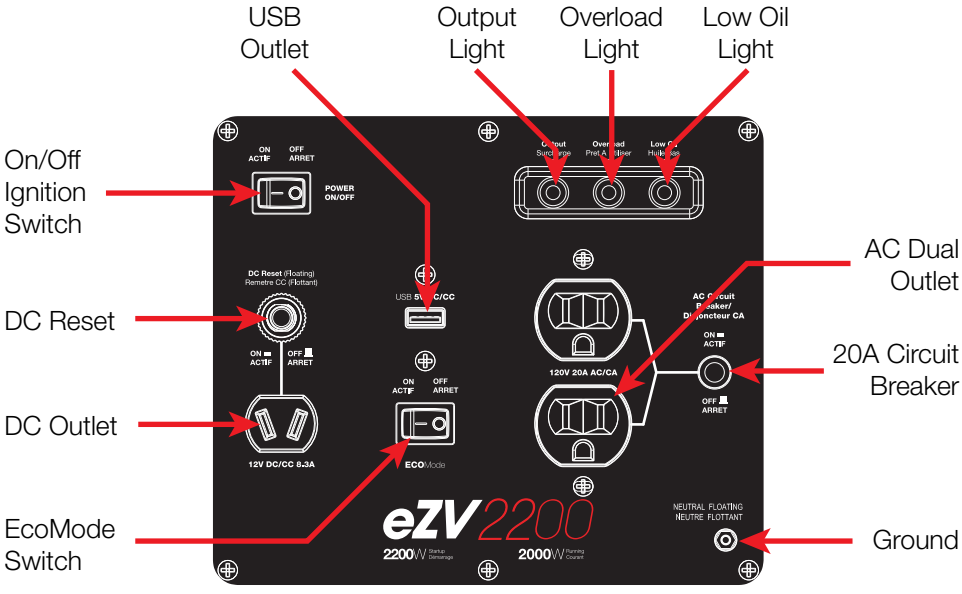
- To avoid breathing in poisonous carbon monoxide from the exhaust gases, adequate ventilation should be provided if the generator set is running in a partially enclosed space.
- If the generator set is stored outdoors, check all the electrical components on the control panel before each use. Moisture can damage the generator and can lead to an electric shock.
- When storing gasoline or equipment with fuel in tank: store away from furnaces, stoves, water heaters or other appliances that have a pilot light or other ignition source because they can ignite gasoline vapors.
- Generators vibrate in normal use. During and after the use of the generator, inspect the generator as well as extension cords and power supply cords connected to it for damage resulting from vibration. Have damaged items repaired or replaced as necessary. Do not use plugs or cords that show signs of damage such as broken or cracked insulation or damaged blades.
- If you start to feel sick, dizzy, or weak after the generator has been running, move to fresh air RIGHT AWAY. See a doctor. You could have carbon monoxide poisoning.

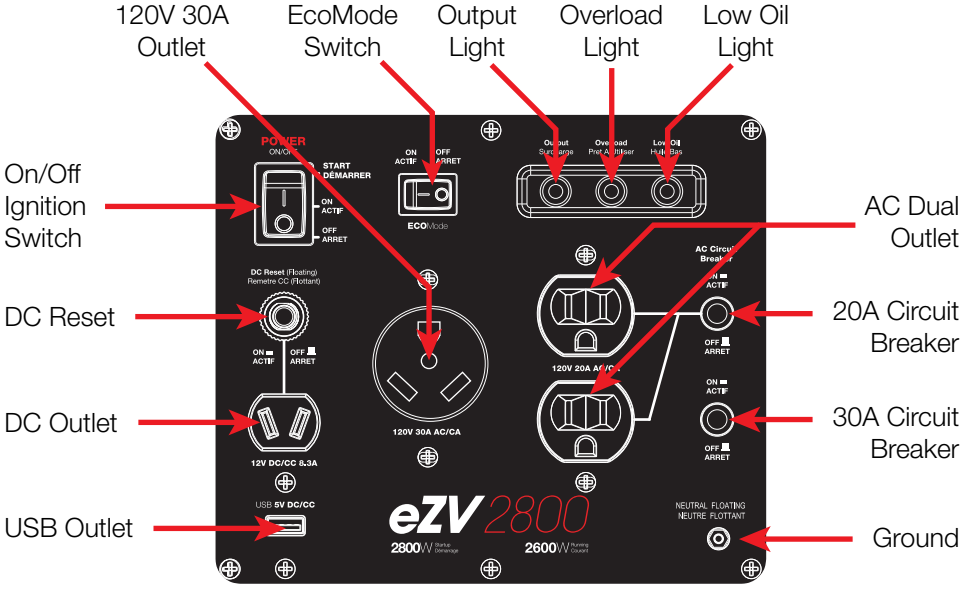
Chapter 2 — Learn About Your Generator

This section will show you how to identify key parts of your generator. Going over the terminology below will make sure we're on the same page.

2.1 Identification of Components




USB Outlet
Output Light
Overload Light
Low Oil Light
On/Off Ignition Switch
DC Reset
DC Outlet
EcoMode Switch
AC Dual Outlet
20A Circuit Breaker
Ground
eZV2200
2200W
2000W
120V 20A AC/CA
12V DC/CC 8.3A
NEUTRAL FLOATING
NEUTRE FLOTTANT


120V 30A Outlet
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USB Outlet
AC Dual Outlet
20A Circuit Breaker
30A Circuit Breaker
Ground
eZV2800
2800W
2600W
120V 30A AC/CA
12V DC/CC 8.3A
NEUTRAL FLOATING
NEUTRE FLOTTANT

2.2 Make Sure You Have Everything

Part Name	Quantity
EZV series Generator	1
User Guide	1
DC Charging Cables	1
450mL 10W30 Oil with Funnel	1
Tool Kit	1

Make sure your generator set has everything in the table above.

Chapter 3 — Setting Up your EZV series Generator

Setup should be done every time you start up your generator, these quick checks will ensure you get the most out of your generator.

Exhaust gas contains poisonous carbon monoxide. Never run the generator in an enclosed area. Be sure to provide adequate ventilation. Operate the generator on a level surface. If the generator is tilted, fuel spillage may result. Keep away from moving parts while the generator is running. The generator is air-cooled and may be damaged if ventilation is inadequate.

3.1 Checking the Engine Oil Level

1. Ensure the generator is on a level surface.
2. Inspect engine oil:
3. Take out the oil filler cap and clean the dipstick.
4. Check the oil level by reinserting the oil filler cap without rotating it. Remove the oil filler cap and examine the oil level. If the oil level is at or below the minimum oil level, refill the oil to the maximum oil level mark.
5. Reinsert the oil filler cap and tighten securely.

Engine oil is a major factor affecting engine performance and service life. Non-detergent or vegetable oils are not recommended.

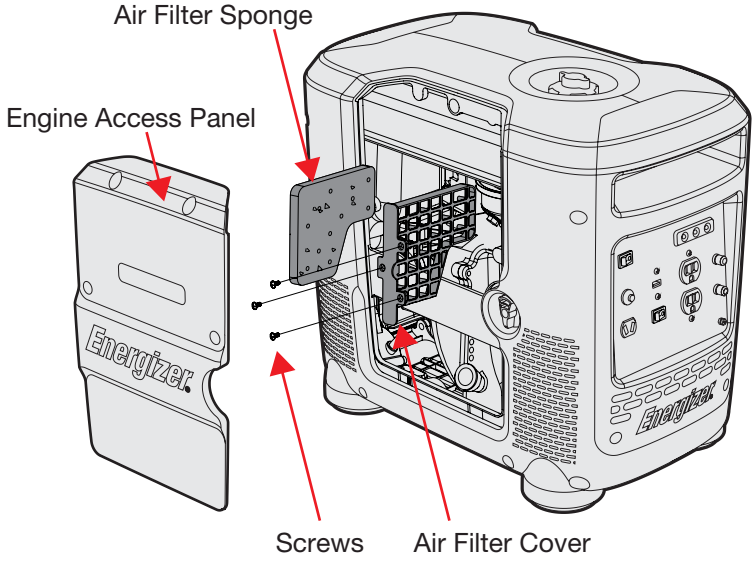
Gasoline substitutes are not recommended. They may be harmful to the fuel system components.

Gasoline is highly flammable and explosive under certain conditions. Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow open flames or sparks in the area where the generator is being refueled or where gasoline is stored. Do not overfill the tank. Be careful not to spill fuel when refueling. Wipe up any spilled gasoline and let the area dry before starting the engine.

3.2 Check the Air Filter

1. Unscrew and remove the engine access panel. Remove the air filter element and observe for cleanliness.
2. Clean the air filter element with soap and water or solvent. Squeeze dry and then soak in clean engine oil.
3. Squeeze out all excess oil and reinstall. Replace the filter if it is damaged.

Check the air filter using the maintenance schedule. Always inspect air filter before using the generator. Clean Air Filter every 3 months or after 50hrs of operation according to Section 5.3 Cleaning the Air Filter.



Chapter 4 — Using Your EZV series Generator

DANGER - CARBON MONOXIDE
Using a generator indoors WILL KILL YOU IN MINUTES.

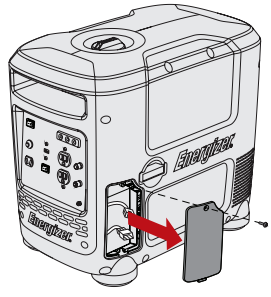
- **Generator exhaust contains carbon monoxide (CO). This is a poison you cannot see or smell. If you can smell the generator exhaust, you are breathing CO. But even if you cannot smell the exhaust, you could be breathing CO.**
- **NEVER use a generator inside homes, garages, crawlspaces, or other partly enclosed areas. Deadly levels of carbon monoxide can build up in these areas. Using a fan or opening windows and doors does NOT supply enough fresh air.**
- **ONLY use a generator outside and far away from windows, doors, and vents. These openings can pull in generator exhaust.**
- **Even when you use a generator correctly, CO may leak into the home. ALWAYS use a battery-powered or battery-backup CO alarm in the home.**
- **If you start to feel sick, dizzy, or weak after the generator has been running, move to fresh air RIGHT AWAY and seek medical attention. You could have carbon monoxide poisoning.**

Before using generator, a ground wire must be connected to the ground terminal. The Ground terminal is located on the Front Panel. Before using the ground terminal consult a qualified electrician.

4.1 Initial Setup of Your Generator

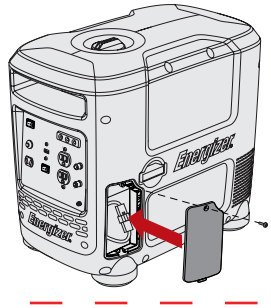
We know you're excited to get using your generator. Please be sure to follow the setup, operation, and shut off instructions below thoroughly to ensure the best lifespan for your generator.

Steps 1-3 are for the EZV2800. If you have an EZV2200 start on Step 4.

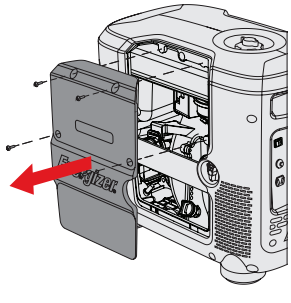


1. Setup the Battery: Remove the Battery Access Panel from the unit by unscrewing the screw at the top and releasing the panel.

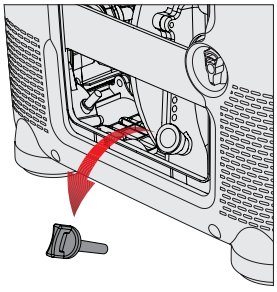
2. Connect the Battery: locate and connect the loose connectors from the battery wiring harness and the main wiring harness. The battery is now connected to the unit.



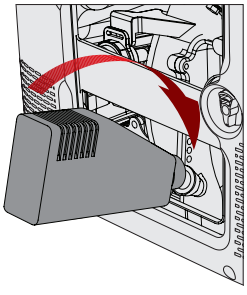
3. Re-install the Battery Access Panel onto the unit. Ensure the screw is fastened properly.



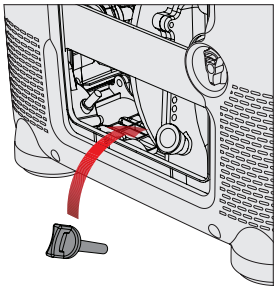
4. Remove the main engine access panel from the unit by unscrewing the (4) screws at the top and middle of the unit.



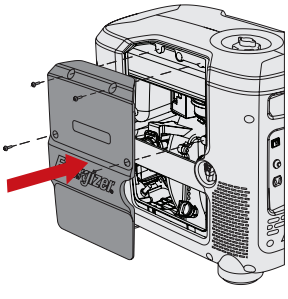
5. Locate, unscrew, and remove the Oil Dipstick, exposing the internal engine compartment. Be sure not to allow any dust or debris near the engine during this time.



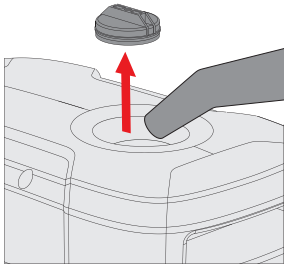
6. Pour in the full contents of the 450 mL oil bottle provided with your unit, or fill to the full mark located on the dipstick.



7. Re-install the Oil Dipstick and fasten tightly. Wipe away any excess oil. For best results, drain and refill the engine oil after the first 20 hrs of use, and every 50 hrs thereafter. Do not remove the Oil Dipstick when the engine is warm from prior use.



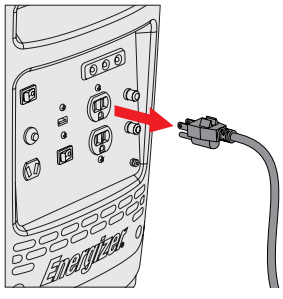
8. Re-install the Engine Access Panel onto the unit, ensuring that all (4) screws are fastened properly.



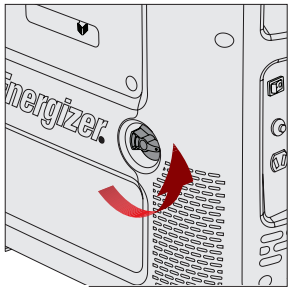
9. Remove the fuel cap, exposing the fuel tank . Be sure not to allow any dust or debris near the engine during this time. Pour 91 octane unleaded gasoline into fuel tank, add Ethanol Shield™ to fuel tank as directed on bottle, and replace the fuel cap.

4.2 Operating Your Generator - Manual Start

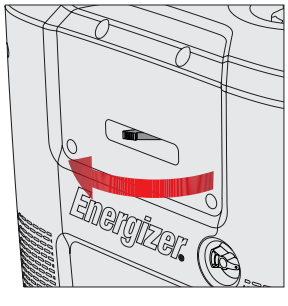
All EZV generators can be started using the manual starting method. EZV models that include batteries can also be started using the convenient electric start method on page 21, these models also include an automatic choke.



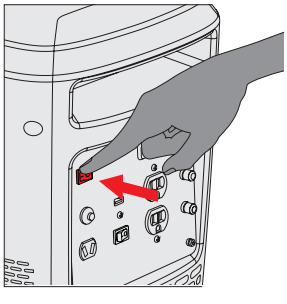
1. Disconnect all devices from the generator.



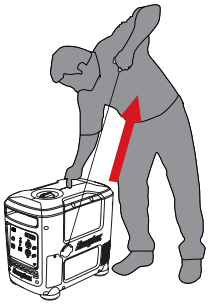
2. Open the fuel valve: turn the fuel valve from "off" to "on". Make sure the valve is turned all the way on.



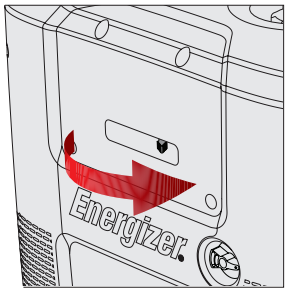
3. Turn choke to fully "Closed" position. Leave the choke in the "Open" position if the generator is still warm from recent use, or if the air temperature is higher than 50°F (10°C).



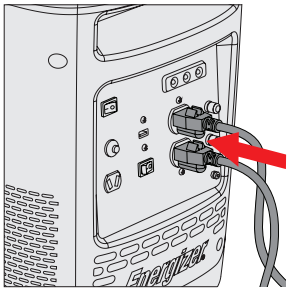
4. Turn Power switch to "On". Make sure EcoMode switch is set to "Off".



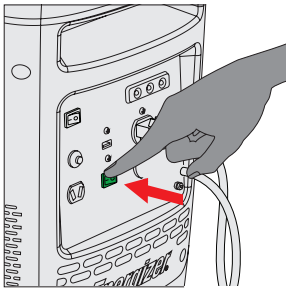
5. Pull Recoil handle until engine starts. Several pulls may be required until engine starts. Do not release the pull cord at the end of a pull, this will damage the recoil assembly. Bring the pull handle back down to the unit by hand.



6. Once the generator has started, wait at least 30 seconds for it to warm up, and then you may slowly open the choke lever until it is fully open.



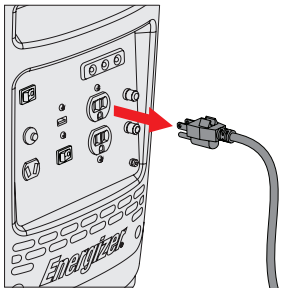
7. Connect all of your devices to the generator.



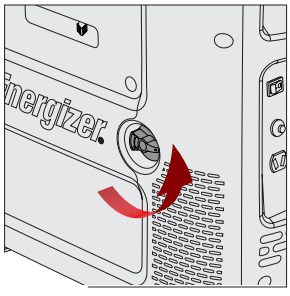
8. Turn EcoMode switch to "On". This will reduce the output to a level where the generator will only produce enough power for the connected devices. The reduction of extra, unused power saves fuel.

Operating Your Generator - Electric Start

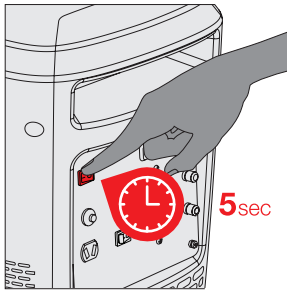
Only the EZV2800 is equipped with a battery, and can follow these instructions. It also has an automatic choke.



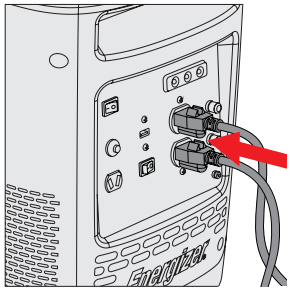
1. Disconnect all devices from the generator.



2. Open the fuel valve: turn the fuel valve from "off" to "on". Make sure the valve is turned all the way on.

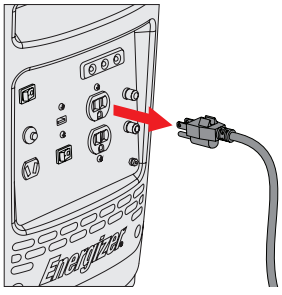


3. Turn Power switch to "Start" for 5 seconds to start engine. If the engine does not start, the battery may be dead, follow manual start instructions to start the engine. Running the engine charges the battery.

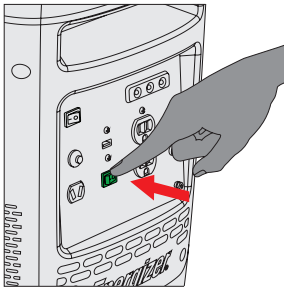


4. Connect all of your devices to the generator and turn EcoMode switch to "On". This will reduce the output to a level where the generator will only produce enough power for the connected devices. The reduction of extra, unused power saves fuel.

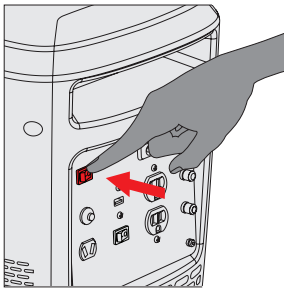
4.3 Shutting Off Your Generator



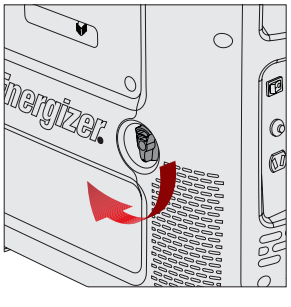
1. Disconnect all devices from the generator.



2. Turn EcoMode switch to "Off". Let generator run with EcoMode off for 2 minutes.



3. Turn Power switch to "Off".



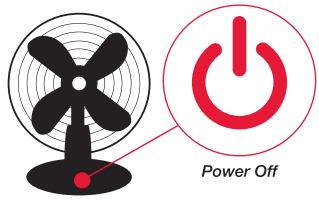
4. Close the fuel valve by turning it to "Off".

To stop the engine in an emergency, turn the engine switch “OFF”. Always connect the ground terminal at the front panel to the ground (earth) to prevent electrical shock.

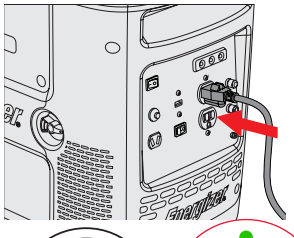
4.4 Using an EZV series generator with your Devices

After starting your generator you can connect your devices to it. Before starting, make sure that you know what you are able to power with your Generator. Here's how you can find out: Add the watt ratings of all the loads that the generator set will be powering at the same time. Make sure that total wattage will not exceed the generator rating.

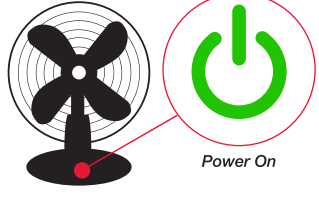
For example: A generator set rated 5000W can power two 1500W heaters, a 900W circular saw, a 500W drill and a 100W light at the same time (4500W combined). However, to operate a second 900W saw, it will be necessary to disconnect one of the 1500W heaters.



1. Turn off all devices before connecting them to your generator.



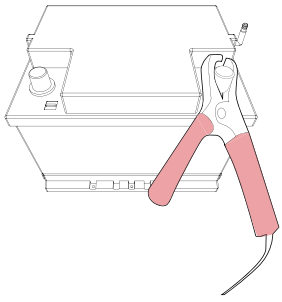
2. Insert the plug of the device into your generator based on its voltage requirements. Your EZV series generator includes two 120V AC outlets, one 5V USB outlet, and one 12V DC outlet for charging automotive batteries. See Section 4.5 before using the DC outlet.



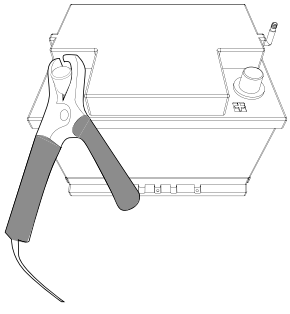
3. You can now turn your devices on and use them.

4.5 Using an EZV series generator to Charge Automotive Batteries

You can use 12V 8.3A DC output to charge automotive batteries. Be sure to monitor the battery charge time. Overcharging may cause explosion, injury, and damage to the generator.

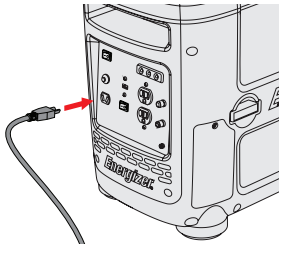


1. Connect the positive (red) terminal of the battery to the red (positive) terminal, the 12V 8.3A DC Output Terminal on the front panel of your generator.



2. Connect the negative (black) terminal of the battery to the black (negative) terminal, the 12V 8.3A DC output terminal on the front panel of your generator.

Do not reverse the polarity of these connections.



3. Insert the DC plug into the DC receptacle. The generator should be running, and with EcoMode off. After insertion EcoMode may be turned on.

An explosive hydrogen gas is discharged through vent holes in the battery during charging. Do not allow sparks or open flames around the generator or battery during the charging process.

Electrolyte fluid can burn eyes and clothing. Be extremely careful to avoid any contact. If injured, wash the affected area immediately with large amounts of water and seek medical attention immediately.

When charging a large capacity battery or totally discharged battery, excessive current may force the DC breaker to turn off. In this case, use a battery charger.

Chapter 5 — Maintaining Your EZV series Generator

Proper maintenance ensures safe, economical and trouble-free operation. Improper maintenance may cause the generator to malfunction and can lead to serious injuries. Contact Energizer Power Customer Support if you have any maintenance questions.

5.1 Maintenance Schedule

Item	Task	Daily	Every 20 Hours	Every 50 Hours	Every 100 Hours	Every 300 Hours
Generator	General Inspection	•				
Engine Lubricants	Inspect Oil Level	•				
	Replace		•*		•	
Air Filter	Inspection	•				
	Cleaning			•		
Sediment Cup	Cleaning			•		
Spark Arrester	Cleaning				•	
Spark Plug	Inspection & Cleaning				•	
	Replacement					•
Valve Clearance	Inspection & Adjusting					•
Combustion Chamber	Inspection & Adjusting					•
Fuel Tank and Strainer	Cleaning					•
Fuel Line	Cleaning	Every two months (replace if necessary)				
Exposed Metal Parts	Lubricate with oil	After every use and especially before storage				

* For first use of the generator.

5.2 General Inspection Tips

1. Look for fuel leaks around the fuel tank, fuel hose, and fuel valve. Close the fuel valve and repair leaks immediately.
2. Look and listen for exhaust leaks while the engine is running. Have all the leaks repaired before continuing operation.
3. Check for dirt and debris and clean as necessary .
4. Check the engine oil level and add oil as necessary.

Do not use gasoline or low flash point solvents for cleaning. They are flammable and could explode under certain conditions.

5.3 Cleaning The Air-Filter

Using gasoline or other flammable solvents can cause a fire or explosion. Do not operate this product without an air filter.

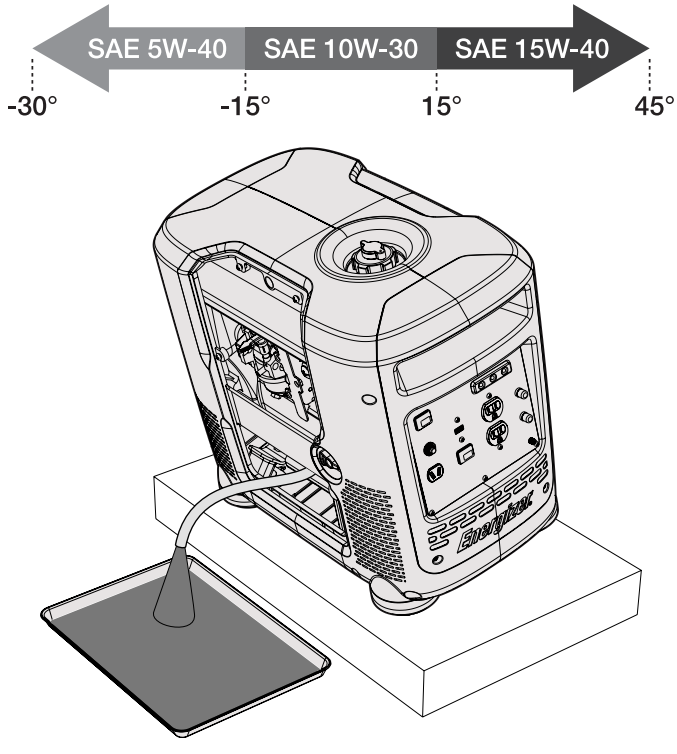
1. Unscrew and remove the engine access panel.
2. Unscrew and remove the air filter assembly.
3. Remove the foam filter.
4. If the foam element is dirty, clean it in warm soapy water, rinse, and allow it to dry thoroughly, or clean in non-flammable solvent and allow to dry.
5. Dip the foam element in clean engine oil, then squeeze out all excess oil. The engine will smoke when started if too much oil is left in the filter.
6. Wipe dirt from the air filter unit and cover using a moist rag.

5.4 - Changing the Engine Oil

Used motor oil can cause skin irritations if left in long-term contact with skin. Wash hands thoroughly with soap and water after handling oil.

Do not dispose of used oil in drains or soil. Local service shops provide environmentally-friendly disposal methods.

1. Stop the engine and remove the oil access panel.
2. Place a pan beside the generator.
3. Remove the oil drain screw and, using the oil drainage spout (found in your tool kit) allow the oil to completely drain into the pan.
4. Reinstall drain screw before filling the engine with fresh oil. Do not overfill oil reservoir. Use a funnel to prevent spillage. See chart below for recommended oil.
5. Reinstall the oil filler cap and tightly fasten.

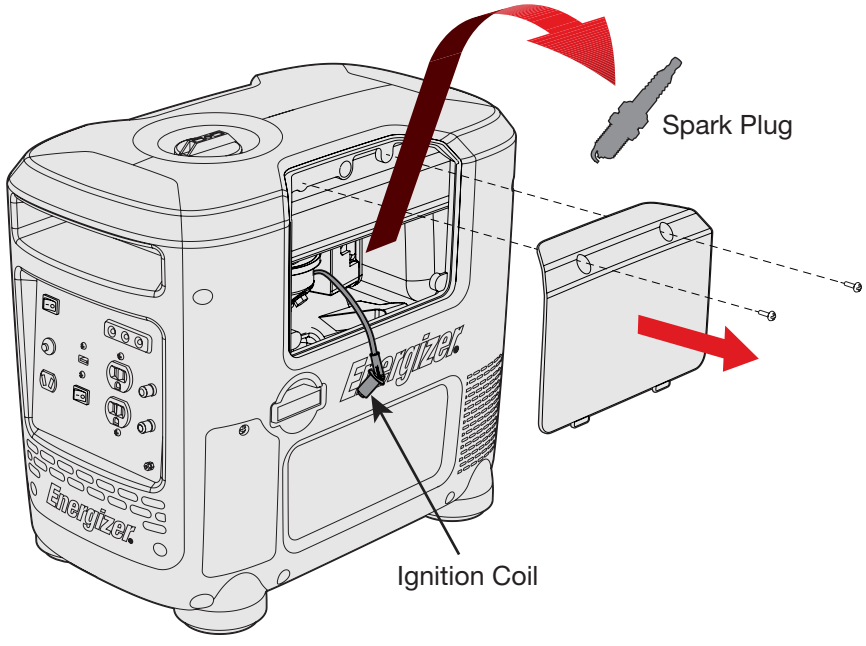


5.5 - Replacing and Cleaning the Spark Plug

Do not rinse spark plug in water. Follow guidelines and be careful not to overtighten the spark plug.

Tighten ½ turn when installing a new spark plug.
Tighten ¼ turn when re-installing an old spark plug.

1. Unscrew and remove spark plug access panel and screws.
2. Remove ignition coil from spark plug and remove spark plug with spark plug wrench.
3. Inspect the spark plug and clean any dirt from the electrodes with a wire brush. If electrodes are worn or show signs of wear, replace spark plug.
4. Measure the electrode gap with a spark plug gauge and adjust as necessary by bending the side electrodes. Ensure that the gap is between 0.7 and 0.9mm
5. Reinsert the plug carefully. Tighten with a spark plug wrench.



5.6 - Handling and Storage

Handling

1. Turn off the power switch and the fuel valve when transporting the generator set.
2. Do not touch engine until the engine has cooled down.
3. Keep the generator at a level position in order to prevent spillage.

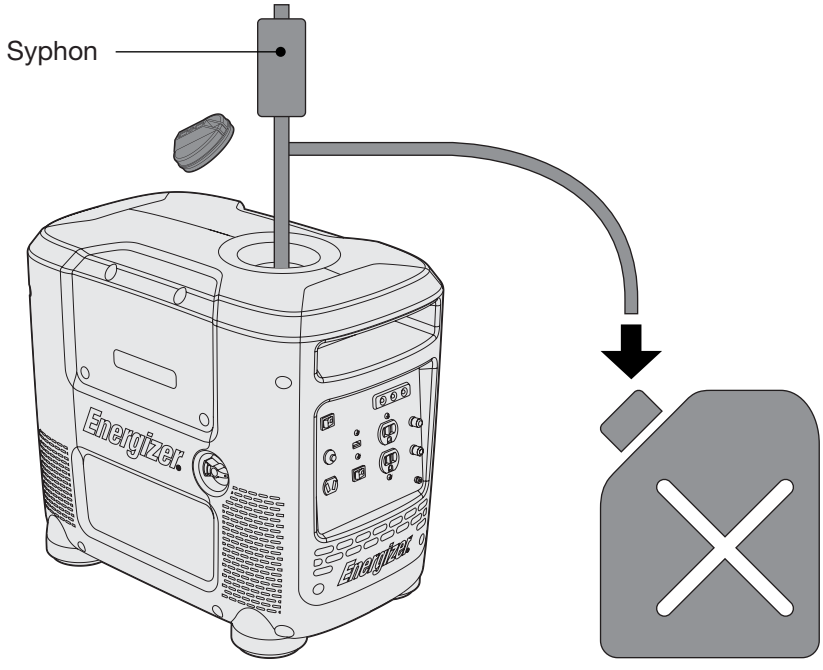
Storage

Before storing the generator set for an extended period:

1. Ensure that the storage area is free of excess humidity and dust.
2. Drain the fuel tank and the carburetor.
3. To prevent corrosion, coat screws and exposed metal with antirust oil at least twice per year.

Draining the Fuel Tank

1. Turn OFF the engine. Remove the fuel cap 1. Turn OFF the engine. Remove the fuel cap and the debris screen underneath the fuel cap.
2. Empty the fuel tank into an approved gasoline container using a siphon.



6.0 Troubleshooting

Common issues can be fixed by following the instructions in this guide. If the unit will not function after following these instructions, contact technical support before attempting to use or repair the product.

PROBLEM	SYMPTOMS	CORRECTION
Generator will not start	Generator will not start	**1.** The power switch is in the “Off” position. Switch to “On.” **2.** The engine is out of gasoline, add more. **3.** Engine choke is in wrong position. Adjust choke lever according to instructions on page 19. **4.** Faulty spark plug, replace with equal or greater quality plug. Refer to page 33 in your user’s manual for a complete list of spark plug compatibility codes. **5.** Insufficient oil, add more oil. **6.** Clogged fuel line, inspect gas tank for debris.
	High resistance when pulling recoil starter.	**1.** The engine does not have enough oil - add oi l. **2.** Air filter element obstructed by debris. Clean according to user manual instructions on page 26.
Difficulty starting	Engine requires many attempts to start	**1.** Disconnect load before starting. **2.** Incorrect oil being used. Please refer to the oil usage chart on page 27 in your user’s manual. **3.** Faulty spark plug, replace with equal or greater quality plug. Refer to page 33 in your user’s manual for a complete list of spark plug compatibility codes.

Thick smoke released from exhaust	Exhaust fumes thick and dark	**1.** Adjust choke lever according to user manual instructions on page 19. **2.** Incorrect oil being used. Use oil according to oil usage chart in user manual on page 27. **3.** Air filter element obstructed by debris. Clean according to user manual instructions on page 26.
Generator does not produce power	No indicator lights or display on front panel	**1.** Generator circuit breaker off or tripped **2.** Remove all loads, reset breaker, and check device for defects. Do not exceed generator rating.
Generator does not produce power (cont.)	Overload indicator light keeps flashing	**1.** Adjust choke lever according to instructions on page 19. **2.** *When a connected device draws high startup power the overload and output indicator light may briefly illuminate, but this is to be expected. Once the device starts up the overload indicator light will shut off and the output light will remain green. **3.** Ensure device wattage consumption does not exceed the generator's maximum peak output.
	No DC output	**1.** Disconnect battery, reset breaker and test the battery for shorts. **2.** Clean battery connector nodes.
Generator outputs unstable power	Connected device does not operate consistently	**1.** Verify device start up requirements (Wattage consumption). Do not exceed the generators maximum peak output.

	Device will not start up	**1.** Remove all loads, reset breaker, and check device for defects. Do not exceed generator rating. **2.** Ensure device's wattage consumption does not exceed the generator's maximum peak output.
	Engine idle unusually high or low	**1.** Carburetor in need of tuning. For details on how to adjust correctly please contact your local service centre, or contact Midland Power Inc. at 1-877-528-3772.
Generator overheats	Operation is normal when generator is cool, overheating occurs within moments of start up.	**1.** Atmospheric temperature high (excess of 35°C). **2.** Insufficient air circulation in vicinity of generator. **3.** Low oil viscosity. Use oil according to oil usage chart in user manual on page 27. **4.** Fouled spark plug, replace with equal or greater quality plug.
Engine idle fluctuates		**1.** Carburetor in need of tuning. For details on how to adjust correctly please contact your local service centre, or contact Midland Power Inc. at 1-877-528-3772. Missing ground reference on return side of differential analog output (external). **2.** Air filter element obstructed by debris. Clean according to user manual instructions on page 26

Engine stops	Engine idles down and shuts off	**1.** The power switch is in the “Off” position. **2.** The engine is out of gasoline. Add regular unleaded gasoline. **3.** Air filter element obstructed by debris. Clean according to user manual instructions on page 26 **4.** Adjust choke lever according to user manual instructions on page 20. **5.** Incorrect oil being used or insufficient oil level. Always ensure high oil levels, and use oil according to oil usage chart in user manual on page 27. **6.** Fouled spark plug, replace with equal or greater quality plug. Refer below for a complete list of spark plug compatibility cod es.

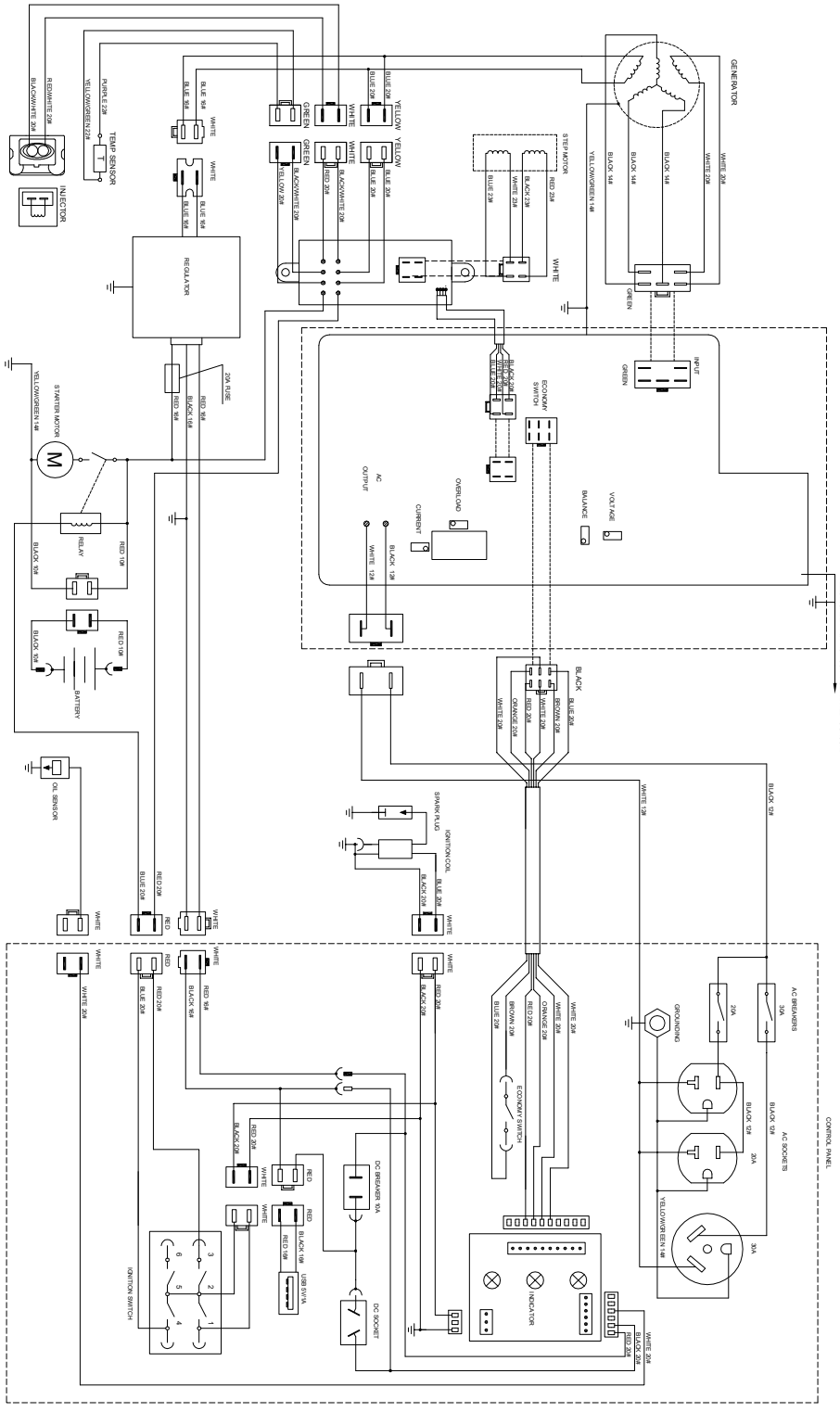
SPARK PLUG COMPATIBILITY

BRAND	EZV SERIES
NGK	CR7HSA
DENSO	U20FPR
CHAMPION	RZ10YC
BOSCH	U24BC

Chapter 7- Specifications

		EZV2200	EZV2800
GENERATOR	Rated frequency (Hz)	60	60
	Rated AC Output Power (W)	2000	2600
	Max AC Output Power (W)	2200	2800
	1-Phase Rated AC Voltage (V)	120	120
	Power Factor	1.0	1.0
	Max DC Output Power (W)	100	100
	Rated DC Voltage (V)	12	12
ENGINE	Type	3.80 HP, Single Cylinder, forced air cooling, 4-stroke, OHV	5.3 HP, Single Cylinder, forced air cooling, 4-stroke, OHV
	Displacement (cm^3 or cc)	125	150
	Ignition mode	Transistor Controlled Ignition	Transistor Controlled Ignition
	Starting mode	Recoil Start	Electric and Recoil Start
	Max. Output (rpm)	5000	4000/5000
	Fuel tank capacity (Gal/Litres)	1.85 / 7.0	1.85 / 7.0
	Oil capacity	450mL (10W30)	450mL (10W30)
	Fuel Type	91 Oct. Unleaded Gasoline	91 Oct. Unleaded Gasoline
	Max. Running (Rated) Volume (dB (at 7m))	64	65
	Running Time Per Tank (hours)	6.5hrs with 75% load	5.8hrs with 75% load
BATTERY	Battery	N/A	12V 7Ah
	Nominal Voltage	N/A	12V
SIZE	Packaging/Product Dimentions L x W x H (mm)	570 x 350 x 530 540 x 320 x 480	570 x 350 x 530 540 x 320 x 480
	Packaging/Product Weight (kg)	35.5 / 33.5	42.3 / 37.4

Chapter 8- Wiring Diagram



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Chapter 9 - Learn About your Warranty

Energizer Power Equipment Customer Support Center
Toll Free: 1-877-528-3772
E-mail: support@energizergenerators.com
Online: www.energizergenerators.com

ENERGIZER POWER EQUIPMENT PRODUCTS ARE DISTRIBUTED BY:

Midland Power Inc
376 Magnetic Drive, Toronto, ON M3J 2C4, Canada

This product is warranted to be free of defects in material and workmanship for two years from date of purchase. This warranty guarantees that any defective parts will be repaired or replaced at no cost, including diagnosis and replacement parts.

LIMITED WARRANTY PERIODS

Recreational and Residential use: Two Years Limited

- 1st Year: Parts and Labor
- 2nd Year: Parts only

Commercial use: 6 months limited, parts and labor

This limited warranty begins at the initial time of retail purchase and covers manufacturer's defects caused by a defect in components or workmanship during the three (3) Year period. The warranty coverage is continual from the initial date of purchase and does not restart at anytime under any circumstances. This limited warranty is valid for residential or recreational applications only and only when the generator receives all necessary preventative maintenance as described in the Energizer Generators User Guide. The repair or replacement of a generator will take place within a reason- able period of time during normal business hours. All repair and replacement parts shall be warranted for (90) days after the initial date of installation or purchase.

LIMITATION OF REMEDIES AND DISCLAIMERS

Midland International Inc. disclaims any responsibility for loss of time or use of the generator in a recreational vehicle or any vehicle in which the generator is installed, transportation, commercial loss, or any other incidental or consequential damage. Any implied warranties are limited to the duration of this written warranty. **THE FOREGOING LIMITED WARRANTY IS EXCLUSIVE OF AND IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND OF ANY OTHER WARRANTY WHETHER EXPRESS OR IMPLIED**. Consumable parts, such as oil or fuel filters, fuel cut off valve, brushes, fuel injection nozzle valve, lubricant, or ignition plug, are not covered under this warranty. All expenses incurred in maintaining and replacing parts for generator shall fall on the purchaser. This warranty coverage does not include parts affected by accident and/ or collision, corrosion or rust, normal wear, incorrect fuel type or fuel contamination, use in an application for which the product was not intended, unauthorized service, or any other misuse, neglect, incorporation or use of unsuitable attachments or parts Damage to voltage regulators caused by failure to ground, shorting or overloading will not be covered under this warranty. Under this Warranty, we do not have the obligation to bear any transportation fees of any product to/from an authorized Warranty Center. Unauthorized alteration, installation or any cause other than defects in material or workmanship of the product will not be covered under the warranty.

EXCLUSIONS NOT COVERED BY THIS LIMITED WARRANTY

1. Normal engine/alternator wear.
2. Damage caused by lack of maintenance as described in the Energizer User Guides, or negligence by using improper or impure motor oil, coolant, or fuel.
3. Damage caused by accidents, improper installation or storage.
4. Damage caused by water ingestion, submersion, or external water damage.
5. Damage or non-performance caused by operation of the generator set in a marine application.
6. Damage caused by operation with improper fuel, or at speeds, loads, conditions, or modifications contrary to published specifications.

7. Items not supplied by Energizer, including, but not limited to, starting batteries, battery cables, external wiring, fuel lines, filters, etc; (refer to exclusions).
8. Repairs made during the warranty period, without first obtaining a case number from Energizer.

Batteries supplied with any generator product should be considered a bonus item and not covered by warranty. Batteries can be damaged by shock, shorting terminals, heat, acid spillage and a number of other factors that cannot be controlled after they have left our facility. It is the customer's responsibility to take great care when handling a battery so no spillage of acid will occur and cause corrosion; damage caused by battery acid is not covered under this warranty.

Warranty Claim Procedure:

Warranty service must be performed by one of our authorized service dealers. If you feel your generator is malfunctioning due to a defect or misuse, simply contact our customer support center for technical advice, a warranty claim or general information.

Warranty service, operation assistance and product support is provided by Energizer. Contact us at the following numbers.

PRODUCT REGISTRATION

Product registration is required for product support and warranty coverage. The owner's registration found in the user manual can be completed and mailed. You can also register Online at www.energizergenerators.com.

Proof of purchase may be required for warranty claims. Keep a copy of the original receipt, UPC code and serial number with this manual.

Customer Service

1-877-528-3772 (toll-free)

support@energizergenerators.com

EMISSION CONTROL SYSTEM WARRANTY

Your new Midland Power Inc. engine complies with the U.S. EPA (Environmental Protection Agency) regulations, State of California emission regulations (models certified for sale in California only) and Canada EPA regulations. Midland Power Inc. provides the emission warranty coverage for engines in the United States and its territories. Midland Power Inc. provides the emission warranty for engines in the 13 provinces and territories of Canada. In the remainder of this Emission Control System Warranty, Midland Power Inc. will be referred to as Midland Power Inc.

YOUR WARRANTY RIGHTS AND OBLIGATIONS:

California: The California Air Resources Board and Midland Power Inc. are pleased to explain the emission control system warranty on your Midland Power Inc. engine. In California, new spark-ignited small off-road equipment engines must be designed, built, and equipped to meet the State's stringent anti-smog standards.

Other States, U.S. territories, and Canada: In other areas of the United States and in Canada, your engine must be designed, built, and equipped to meet the U.S. EPA and Environment Canada emission standards for spark-ignited engines at or below 19 kilowatts.

All of the United States and Canada: Midland Power Inc. must warrant the emission control system on your power equipment engine for the period of time listed below, provided there has been no abuse, neglect, or improper maintenance of your power equipment engine. Where a warrantable condition exists, Midland Power Inc. will repair your power equipment engine at no cost to you including diagnosis, parts, and labor. Your emission control system may include such parts as the carburetor or fuel injection system, the ignition system, and catalytic converter. Also included may be hoses, connectors, and other emission-related assemblies.

EMISSION CONTROL SYSTEM WARRANTY PARTS:

Systems Covered in Warranty	Parts Description
Fuel Metering	Carburetor assembly (includes starting enrichment system), Engine temperature sensor, Engine control module, Fuel regulator, Intake manifold
Evaporative	Fuel Tank, Fuel Cap, Fuel Hoses, Vapor Hoses, Carbon Canister, Canister Mounting Brackets, Fuel Strainer, Fuel cock, Fuel Pump, Fuel Hose Joint, Canister Purge Hose Joint
Exhaust	Catalyst, Exhaust Manifold
Air Induction	Air filter housing, Air filter element
Ignition	Flywheel magneto, Ignition pulse generator, Crankshaft position sensor, Power coil, Ignition coil assembly, Ignition control module, Spark plug cap, Spark plug
Crankcase Emission Control	Crankcase breather tube, Oil filler cap
Miscellaneous Parts	Tubing, fittings, seals, gaskets, and clamps associated with these listed systems

Note: This list applies to parts supplied by Midland Power Inc. and does not cover parts supplied by the equipment manufacturer. Please see the original equipment manufacturer's emissions warranty for non-Midland Power Inc. parts.

**Consumable parts are covered up to a maximum of 30 days.

Warranty Registration Instructions:

Product registration will allow you to request warranty support in the future. Product registration is required for all product support and warranty coverage.

Warranty support, operation assistance and product support is provided by Midland Power Inc., a licensed manufacturer of Energizer Generators. Please contact us directly for any warranty service questions.

Please fill out and submit the online registration form below. You will need a digital copy of your receipt, and the original UPC barcode from your product packaging. The store, date of purchase and product purchase should be clearly visible on the receipt.

YOU CAN REGISTER EASILY USING OUR ONLINE FORM:

www.energizergenerators.com

Enjoy!

Be sure to check energizergenerators.com monthly for updates regarding your generator.