DuroMax XP17500HX

USER MANUAL



This manual provides information regarding the operation and maintenance of these products. We have made every effort to ensure the accuracy of the information in this manual. We reserve the right to change this product at any time without prior notice.

5800 Ontario Mills Pkwy
Ontario, CA 91764 USA
www.duromaxpower.com

Call our Customer Care Team Toll Free 8-5pm PST Mon-Fri
844-DUROMAX

CONTENTS

1. **Introduction**
   - Introduction 6
   - General Safety Procedures 8
   - Carbon Monoxide Safety 14
   - Unit and Purchase Information 16

2. **Generator Components**
   - Generator Components 18
   - Package Contents 20

3. **Generator Setup**
   - Wheel Kit Installation 22
   - Connect the Battery 24
   - Adding Oil 25
   - Adding Gasoline 26
   - Grounding the Generator 27
   - High Altitude Operation 28

4. **Starting the Generator**
   - Checking the Oil 30
   - Check the Gas Level 31
   - Starting the Generator Using Gasoline 32
   - Starting the Generator Using Propane 34
   - Starting the Generator Using Recoil Start 38
   - Starting the Generator Using Remote Start 41

5. **Using the Generator**
   - AC Usage 44
   - Connecting the Generator to a Home 47
   - Connecting a Load to the Generator 48
   - Choosing the Right Power Cord 49
   - Using the Digital Multimeter 50
   - Using the Battery Tender 51
   - Syncing the Remote 53

CONTENTS

6. **Stopping the Generator**

- Shutting Down the Generator On Gasoline 56
- Shutting Down the Generator On Propane 57
- Shutting Down the Generator With the Remote 59

7. **Maintenance and Care**

- Maintenance Schedule 62
- Break-In Period 63
- Maintenance Log 63
- Checking the Oil 64
- Changing the Oil 65
- Cleaning the Air Filter 66
- Spark Plug Maintenance 68
- Emptying the Gas Tank 70
- Transporting the Generator 72
- Storing the Generator for Use Within 30 Days 73
- Storing the Generator for Longer than 30 Days 74
- Specifications 76

8. **Troubleshooting**

- Basic Troubleshooting 78
- Changing/Inspecting the Carbon Brushes 81
- Changing/Inspecting the AVR 83
- Wiring Diagram 85

9. **Warranty** 86

10. **Contact Information** 89

For more information and resources on this model scan the QR code below to link to our website product information page.

DuroMax

THE DUROMAX WAY

The DuroMax Way is more than just a brand, it is our understanding and appreciation of just how important power can be to someone without it...



DUROMAX FOR HOME

Electricity in our home not only provides comfort but safety as well. From keeping the heat or A/C on to keeping our food cold, power is essential to our daily lives. Inevitably when disaster strikes and we are left without power for a prolonged period of time, our way of life is put at risk. This is by far the most critical time for reliable portable power.



DUROMAX FOR WORK

On the job site, portable power allows you the ability to get work done in remote locations when traditional power sources are usually unavailable. Equipment like table saws, sanders, and work lights are a necessity and portable power can play a critical role in getting a job done successfully and efficiently.



DUROMAX FOR PLAY

Camping outdoors in a remote location can get one in touch with nature and allow them to forget the stress of the day to day grind. Here portable power can provide comfort as well as safety. With portable power, you can keep your cell phone charged, light up your campsite, or even brew a cup of coffee, all while being miles from civilization.

The DuroMax Way is a commitment to excellence. This vision is focused on the quality, reliability, and durability of our products combined with outstanding customer service. We understand that having dependable power whenever and wherever you need it provides comfort, safety, and peace of mind. It is through this philosophy that DuroMax achieves our vision of...

POWERING EVERYONE...
ANYWHERE!

INTRODUCTION

DuroMax Power Equipment is headquartered in Ontario, California and is the industry's leader in Dual Fuel and Tri Fuel portable generator technology. In addition to a full assortment of portable generators ranging from digital inverters to large 28,000-watt generators that can power your whole home, their product line includes power stations, engines, pumps, and accessories.

The foundation of our company is built on quality, reliability, durability, and customer service. At DuroMax our vision is simple, we are committed to Powering Everyone... Anywhere!

DuroMax DUAL FUEL

STOP

Please do not return to the store.

DuroMax representatives are ready to help you with any questions, concerns, or issues about your new product. We can guide you through assembly, start up, and how to operate your new generator. We want you to be able to put your new generator to use right away!

CALL US BEFORE YOU CONSIDER RETURNING THE PRODUCT!

TOLL-FREE 1-844-DUROMAX

Notice Regarding Emissions

Engines that are certified to comply with U.S. EPA emission regulations for SORE (Small off Road Equipment), are certified to operate on regular unleaded gasoline and may include the following emission control systems: (EM) Engine Modifications and (TWC) Three-Way Catalyst (if so equipped).

GENERAL SAFETY PROCEDURES



SAFETY ALERT SYMBOL

The safety alert symbol is used with one of the safety words (**DANGER**, **WARNING**, or **CAUTION**) to alert you of hazards. Please pay attention to these hazard notices both in this manual and on the engine.

Please familiarize yourself with the following safety symbols and words:

- **DANGER**: Indicates a hazard that will result in serious injury or death if instructions are not followed.
- **WARNING**: Indicates a strong possibility of causing serious injury or death if instructions are not followed.
- **CAUTION**: Indicates a possibility of personal injury or equipment damage if instructions are not followed.



DANGER: This generator produces poisonous carbon monoxide gas when running. This gas is both odorless and colorless. Even if you do not see or smell gas, carbon monoxide may still be present. Breathing this poison can lead to headaches, dizziness, drowsiness, and eventually death.

- Use outdoors ONLY in non-confined areas.
- Keep several feet of clearance on all sides to allow proper ventilation of the generator.



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



WARNING: This generator produces heat when running. Temperatures near exhaust can exceed 150°F (65°C).

- Do not touch hot surfaces. Pay attention to warning labels on the generator denoting hot parts of the machine.
- Allow generator to cool for several minutes after use before touching engine or areas which heat during use.

WARNING: This generator may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death. A nearby open flame can lead to an explosion even if not directly in contact with gasoline.

- Do not operate near an open flame.
- Do not smoke near the generator.
- Always operate on a firm, level surface.
- Always turn the generator off before refueling.
- Allow generator to cool for at least 2 minutes before removing the fuel cap. Loosen cap slowly to relieve pressure in the tank.
- Do not overfill the gas tank. Gas may expand during operation. Do not fill to the top of the tank.
- Always check for spilled gas before operating.
- Empty the gasoline tank before storing or transporting the generator.
- Before transporting, turn the fuel valve to the off position and disconnect the spark plug.

WARNING: This generator produces a powerful voltage, which can result in electrocution.

- ALWAYS ground the generator before using it (see the “Grounding the Generator” portion of the “PREPARING THE GENERATOR FOR USE section).
- The generator should only be plugged into electrical devices, either directly or with an extension cord. NEVER connect to a building electrical system without a qualified electrician. Such connections must comply with local electrical laws and codes. Failure to comply can create a back-flow of power, which may result in serious injury or death to utility workers.
- Use a ground fault circuit interrupter (GFCI) in highly conductive areas such as metal decking or steelwork. GFCIs are available in-line with some extension cords.
- Do not use uncovered in rainy or wet conditions.
- Do not touch bare wires or receptacles (outlets).
- Do not allow children or non-qualified persons to operate.

DuroMax

GENERAL SAFETY PROCEDURES (CONTINUED)

⚠WARNING

- **INGESTION HAZARD:** This product contains a button cell or coin battery
- **DEATH** or serious injury can occur if ingested
- A swallowed button cell or coin battery can cause **Internal Chemical Burns** in as little as **2 hours**
- **KEEP** new and used batteries **OUT OF REACH of CHILDREN**
- **Seek immediate medical attention** if a battery is suspected to be swallowed or inserted inside any part of the body



3V CR2016
3V CR2032
3V CR2450
Non-Replaceable



This symbol means:
INGESTION HAZARD
This product contains a button cell or coin battery.

1.Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. DO NOT dispose of batteries in household trash or incinerate.
2. Even used batteries may cause severe injury or death.
3.Call a local poison control center for treatment information.
4.Non-rechargeable batteries are not to be recharged.
5.Do not force discharge, recharge, disassemble, heat above 140 Fahrenheit or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
6.Ensure the batteries are installed correctly according to polarity (+ and -).
7.Do not mix old and new batteries, brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries.
8.Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.
9.Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.

GENERAL SAFETY PROCEDURES (CONTINUED)

In addition to the above safety notices, please familiarize yourself with the safety and hazard markings on the generator.




⚠ CAUTION HIGH TEMPERATURE
DON'T
TOUCH
HIGH HEAT
DON'T TOUCH
HOT

CARBON MONOXIDE SAFETY

Carbon Monoxide

Generators are convenient, but they can also be dangerous. All fuel-burning appliances and equipment release a poisonous gas called carbon monoxide.

Carbon monoxide (also known as CO) can be dangerous for humans and pets, even in small amounts, because it blocks oxygen from getting into your body. Carbon monoxide poisoning can lead to death in a very short time. It is odorless, tasteless and invisible, so you may be exposed without knowing it. That is why carbon monoxide is sometimes called "the silent killer."

CO ALERT



Description

The DuroMax CO ALERT system was created to protect our customers and their families from dangerous carbon monoxide. Just like the detector for your home the CO ALERT tests the air for to keep you safe and healthy.



CO Detected

If dangerous carbon monoxide levels are detected:

- The indicator will light red.
- The engine will shutdown.
- The engine will not restart for 5 minutes.



Maintenance Required

If an error in the CO ALERT system is detected the indicator will light yellow. Please contact DuroMax service at 844-DUROMAX for assistance.



ALWAYS READ THE OWNER'S MANUAL FIRST

KNOW THE SYMPTOMS

- HEADACHE
- DIZZINESS
- NAUSEA
- FATIGUE
- SHORTNESS OF BREATH

IF YOU FEEL SYMPTOMS, LEAVE RIGHT AWAY

STAY ALERT WITH CARBON MONOXIDE DETECTORS

POINT FUMES AWAY FROM NEARBY PEOPLE

KEEP IT OUTSIDE AND AWAY FROM DOORS AND WINDOWS

PGMA
Portable Generator Manufacturers' Association

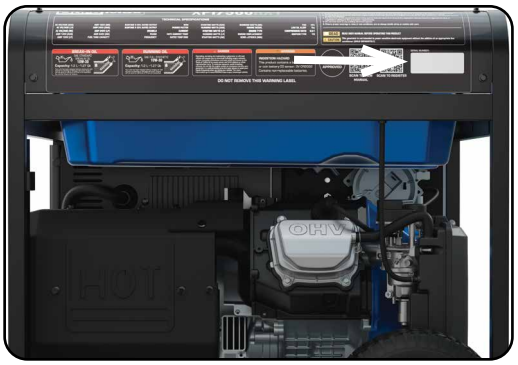
As the only safe way to use a portable generator, taking your generator outside is absolutely mandatory to keep your family safe from carbon monoxide. But there's even more you can do. By educating yourself about all carbon monoxide risks, you'll be better prepared to protect your family from this colorless, odorless threat. Visit **takeyourgeneratoroutside.com** for more information.

TAKE IT OUTSIDE™

CARBON MONOXIDE KILLS

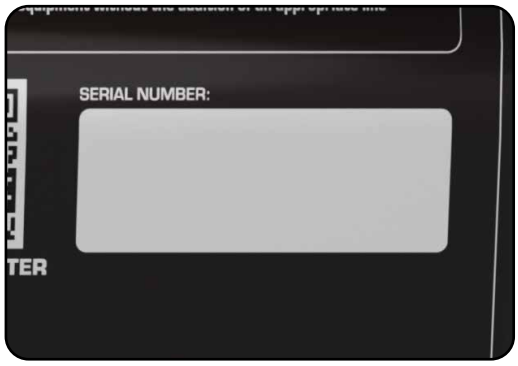
UNIT AND PURCHASE INFORMATION

Serial Number



Serial number

The serial number is located on the engine block, above and to the left of the oil fill.



Serial number format

The serial number will be shown in two parts. The engine model, followed by the serial number.

Engine Model: _____

Serial Number: _____

STAPLE RECEIPT HERE

A purchase receipt may be necessary for warranty parts or service in the future. If you have a paper receipt staple it here for easy reference.

If you purchased the unit online, save the email receipt where you can access it, and record your details here for convenience in the future.

Purchase Date: _____

Order Number: _____

Retailer Name: _____



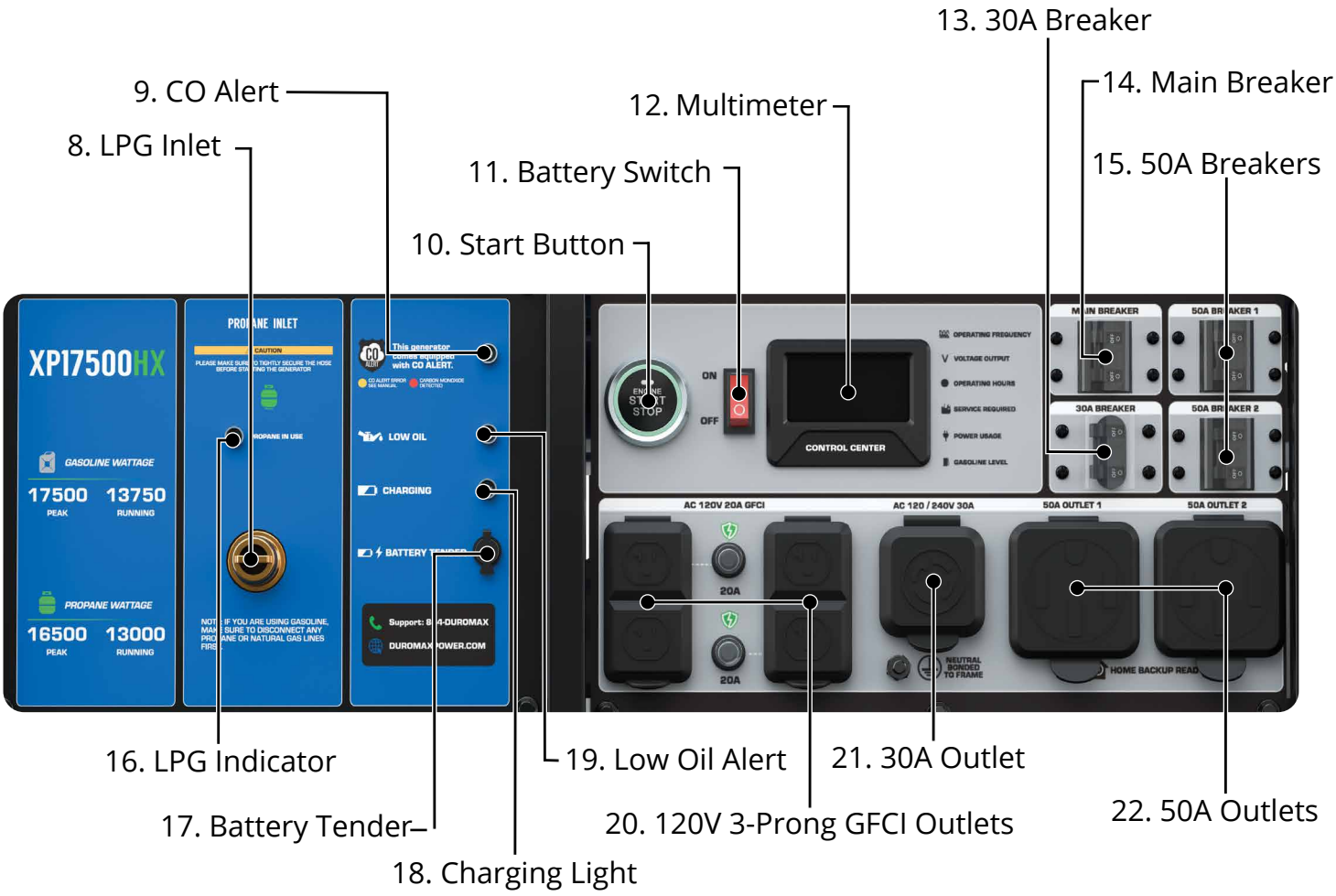
GENERATOR COMPONENTS

To help you get familiar with your new DuroMax generator, please see this component section for easy reference on all the generator's individual features.

GENERATOR COMPONENTS



1. **Recoil Start** – Easy pull recoil start to start the engine without the electric start.
2. **Air Cleaner** - A removable, cleanable, oiled, element that cleans the air going into the engine.
3. **Fuel Valve** - ON/OFF valve that allows gasoline to the fuel switch.
4. **Fuel Tank** - All metal 11.9 gallon gasoline fuel tank.
5. **Handles** - Longest handles of any DuroMax model allow easy movement across any surface.
6. **Battery** - 12V DC battery that powers the electric start system.
7. **Oil Fill and Dipstick** - Use to add or check the oil.
8. **LPG Inlet** - Provides a regulated LPG fuel supply to the engine.
9. **CO-ALERT -** Shuts down the engine in the event of CO buildup.
10. **Start Button** – Push button start switch. Press for 2 seconds to start the generator. Hold for 2 seconds to stop the generator.
11. **Battery Switch** – Prevents battery discharge during storage.
12. **Multimeter** – Displays voltage, hertz, time running, gasoline level, and power output.
13. **30A Breaker** - A 30A double pole breaker that protects the 240V 30A outlet from overloads or short circuits.



14. **Main Breaker** - The main breaker that protects the panel from overloads and short circuits.
15. **50A Breakers** - 50A double pole breakers that protect the 240V 50A outlets from overloads or short circuits.
16. **LPG Indicator** - An indicator light that lets you know when the fuel system has switched to propane operation.
17. **Battery Tender** - Easily keep your battery charge when the generator is in storage by using the included 120V battery charger.
18. **Charging Light** - Will light when the generator is charging the on-board battery.
19. **Low Oil Alert** – Will light only if the generator shuts down due to low oil.
20. **120V 3-Prong GFCI Outlets** - Use to connect electrical devices that run 120 Volt, 60 Hz, single-phase, AC current (NEMA 5-20).
21. **30A Outlet** - Use to connect electrical devices that run 120 or 240 Volt, 60 Hz, single-phase, AC current (NEMA L14-30).
22. **50A Outlets** - Use to connect electrical devices that run 120 or 240 Volt, 60 Hz, single-phase, AC current (NEMA 14-50).

PACKAGE CONTENTS

Your generator comes with the items listed below. Please check to see that all of the following items are included with your generator.



Double Sided Screw Driver

Phillips and slot blade screwdriver used for generator maintenance.



Spanner

Assorted wrenches used in generator maintenance and assembly. 10mm/12mm, 13mm/15mm, and 17mm/19mm.



Spark Plug Wrench

Used in spark plug maintenance, inspection, and installation.



Oil Funnel w/ Hose

Used to add oil to the generator without messy spills.



Remote Control

Used to remotely start the generator.



Battery Tender

Used to charge the battery when in storage



Propane Regulator w/ Hose

Used to provide a regulated propane supply to the propane inlet.

- Note: Actual tools may differ in appearance or design from image shown.



GENERATOR SETUP

Proper setup of your generator will get you going as soon as possible while making sure you and your equipment are safe and cared for.

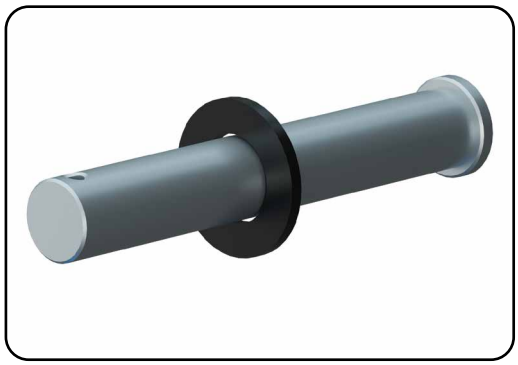
GENERATOR SETUP (CONTINUED)

Step 1 - Wheel Kit Installation



1. Install support legs

Secure the support legs to the frame with the provided bolts.



2. Place washer on each axle

Place the provided washer on each axle.



3. Slide axle in each wheel

Place each wheel axle inside each wheel.



4. Place washer on each axle

Place the provided washer on each axle on the other side of the wheel.



5. Slide axles into the frame

Place each axle and wheel into each frame axle port.



6. Secure the axle

Place cotter pins into the cotter pin hole on each axle.



7. Flip over assembled

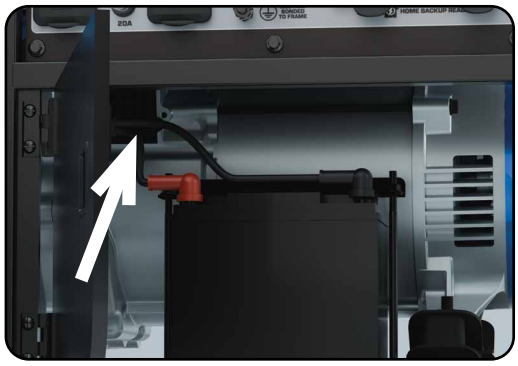
Flip the assembled generator over onto its wheels and support brackets.

Step 2 - Connect the Battery



1. Open the battery door

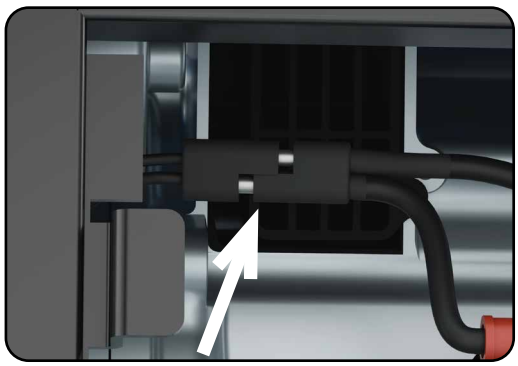
a. Open the battery door using the battery door handle to reveal the battery.



2. Locate the battery connector

a. Locate the battery connector above and behind the battery.

b. Route the free end to other end of the battery connector located on the battery.



3. Clip battery connectors

a. Match the positive and negative cable ends, then clip both ends together.



4. Close the battery door

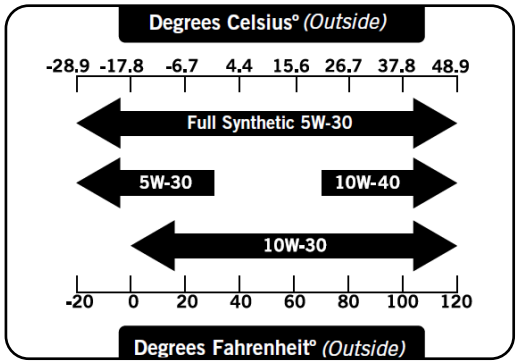
a. Close the battery door to protect the battery.

Step 3 - Adding Oil

The generator requires engine oil to operate properly. The generator, when new from the package, contains no oil in the crankcase*. You must add the proper amount of oil before operating the generator for the first time. This amount is equal to the oil capacity of the engine crankcase:

Model Number	XP17500HX
Engine Oil Capacity	43.96 fl. oz (1.3 L)

WARNING: Do not apply engine oils with additives or 2-stroke gasoline engine oils; they don't have enough lubrication and may shorten the engine's service life.



Engine oil recommended: SAE 10W-30.
Viscosity varies with regions and temperatures. Choose your oil viscosity using the chart to the left.

* A small amount of oil from factory testing may be present on arrival.
* Synthetic oil may be used after the 8 hour initial break-in period. Using synthetic oil does not increase the recommended oil change interval. Full synthetic 5W-30 oil will aid in starting in cold temperatures <5°C (41°F).



Add oil

a. Make sure the generator is on a level surface.

b. Unscrew the oil filler/dipstick cap from the engine.

c. Using a funnel, add the appropriate amount of oil into the crankcase. You can check the oil level of the generator with the dipstick located below the oil filler cap. Simply pull the dipstick out and the indicated oil level is on the end of the stick.

d. Replace oil filler cap.



WARNING: DO NOT overfill the crankcase. This may damage the motor and shorten the overall life of your generator.

Step 4 - Adding Gasoline (Optional)



Add gasoline

a. Make sure the generator is on a level surface.

b. Unscrew gas cap and set aside (**NOTE: the gas cap may be tight and hard to unscrew**).

c. Slowly add unleaded gasoline to the fuel tank. Be careful not to overfill. The fuel gauge on the top of the gas tank indicates how much gasoline is in the generator gas tank.

d. Replace fuel cap and wipe up any spilled gasoline with a dry cloth.

Model Number	XP17500HX
Gas Tank Capacity	11.9 US gal. (45 L)



WARNING: Gas can expand. Do not fill the gas tank to the very top. Leave a minimum of 1 1/2" in open space. Gasoline and gas fumes are highly flammable. Do not fill the tank near an open flame. Always check for fuel spills.

IMPORTANT:

- To ensure that the generator runs smoothly use only FRESH, UNLEADED GAS WITH AN OCTANE RATING OF 87 OR HIGHER.
- Never use an oil/gasoline mixture. Never use old gas.
- Avoid getting dirt or water in the fuel tank.
- Gas can age in the tank and make it hard to start up the generator in the future.
- Never store generator for extended periods of time with fuel in the tank.

Step 5 - Grounding the Generator





Attach grounding wire

a. Ground the generator by tightening the grounding nut against a grounding wire.

b. Connect the other end to a copper or brass grounding rod that's driven into the earth.

A generally acceptable grounding wire is a No. 12 AWG (American Wire Gauge) stranded copper wire. Grounding codes can vary by location. Please contact a local electrician to check the grounding regulations for your area.

NOTE: **If the generator is connected to a home, then it won't be necessary to attach the separate grounding wire and you can opt to use your home ground instead. Please see a certified electrician for further options with grounding your generator.**

WARNING: Failure to properly ground the generator can result in electrocution.

High Altitude Operation

At high altitudes, the standard carburetor air/fuel mixture will be too rich. The performance will decrease, and fuel consumption will increase. A very rich mixture will also foul the spark plug and cause hard starting. Operation at an altitude that differs from that at which this engine was certified, for extended periods of time, may increase emissions. High altitude performance can be improved by specific modifications to the carburetor. If you always operate your generator at altitudes above 3,000 feet (900 meters), have a dealer perform this carburetor modification. This engine, when operated at high altitude with the carburetor modifications for high altitude use, will meet each emission standard throughout its useful life. Even with carburetor modification, engine horsepower will decrease by about 3.5% for each 1,000-foot (300-meter) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.

When the carburetor has been modified for high altitude operation, the air/fuel mixture will be too lean for low altitude use. Operation at altitudes below 3,000 feet (900 meters) with a modified carburetor may cause the engine to overheat and result in serious engine damage.



STARTING THE GENERATOR

If this is not your first time using the generator there are still steps you should take to prepare it for operation each time you use it.

IMPORTANT: At this point you should be familiar with the procedures described in the first portion of this section entitled “GENERATOR SETUP” If you have not yet read this section, go back and read it now.

Step 1 - Check the Oil





Check the oil

The generator is equipped with an automatic shutoff to protect it from damage due to low oil. Nonetheless, you should check the oil level of the engine before each use to ensure that the engine crankcase has a sufficient amount.

To check the oil level:

a. Make sure the generator is on a level surface.

b. Remove the oil cover.

c. Unscrew the oil filler/dipstick cap.

d. With a dry cloth, wipe the oil off of the stick on the inside of the cap.

e. Insert the dipstick without screwing the stick back in. There should now be oil on the stick. If there is no oil on the stick, or oil only at the very end of the stick, you should add oil until you can see oil to the end of the hash marks on the dipstick.

f. Be sure to replace the cap when finished checking oil.

Model Number	XP17500HX
Engine Oil Capacity	43.96 fl. oz (1.3 L)

Step 2 - Check the Gas Level (Optional)



Check fuel level

If running the engine on gasoline check to see that there is sufficient gasoline in the fuel tank. The fuel gauge on top of the tank will give a rough estimate of the gasoline level. The gauge will appear white then fill red as the tank is filled.

Note: Fuel gauge may not register with less than 1/3 fuel tank full.

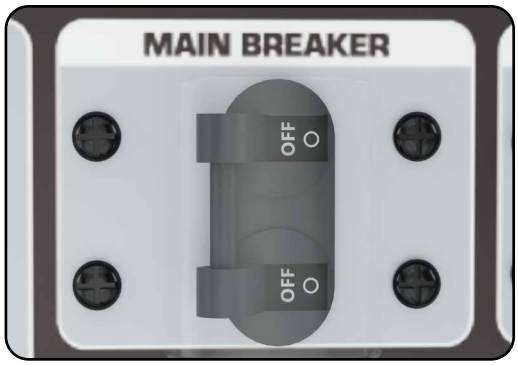


WARNING: Gasoline and gasoline fumes are highly flammable.

- Do not fill the tank near an open flame.
- Always allow the engine to cool for several minutes before refueling.
- DO NOT overfill the fuel tank. Fuel expands when shaken or heated. ALWAYS leave $1^{1}/_{2}$“ space or more at the top of the tank.
- ALWAYS use fresh fuel or stabilized fuel. Old gasoline (older than 30 days) can cause permanent damage to the fuel system.
- Always check for fuel spills.

STARTING THE GENERATOR

Starting the Generator Using Gasoline



1. Shut main breaker OFF

The breaker is located on the upper right side of the front power panel. Flip the breaker down to prevent accidental load when starting the generator.



2. Turn gas valve ON

The gas valve is located above the recoil starter. Rotate the valve counter-clockwise to the vertical position to turn on the gas supply.



3. Turn battery switch ON

The battery switch is located to the right of the start button on the generator panel. Turn the switch “ON” to allow power to the push-button start.



4. Start the generator

The push-button start is located on the upper left side panel. Press the button for 2 seconds and release to start the generator.



5. Turn breaker ON/ Connect

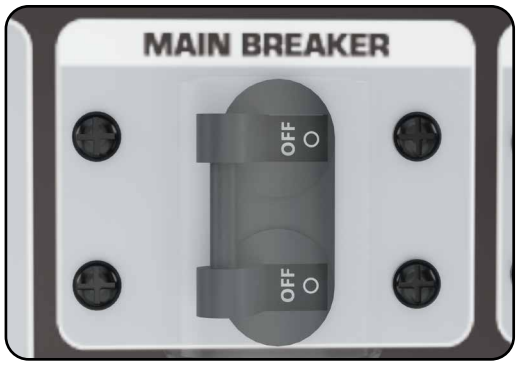
The breaker is located on the right side of the front power panel. Flip the breaker up to allow the power to flow to the receptacles. Connect your devices to the receptacles on the front panel. Start with the largest loads first.

CAUTION: LPG must be shut off and disconnected when using gasoline.

CAUTION: Disconnect all electrical loads from the generator before attempting to start!

WARNING: Operating the starter motor for more than 5 seconds can damage the motor. If the engine fails to start, release the switch and wait 10 seconds before operating the starter again.

Starting the Generator Using Propane



1. Shut main breaker OFF

The breaker is located on the upper right side of the front power panel. Flip the breaker down to prevent accidental load when starting the generator.



2. Turn gas valve OFF

The gas valve is located above the recoil starter. Rotate the valve clockwise to the horizontal position to stop the flow of gasoline to the carburetor.



3. Connect propane hose

The propane inlet is located on the left-hand front panel to the left of the battery tender. Securely connect the propane hose to the inlet.



4. Connect propane tank

Screw the open ACME nut connection to your propane tank and turn the tank on.



5. Turn battery switch ON

The battery switch is located to the right of the start button on the generator panel. Turn the switch “ON” to allow power to the push-button start.



6. Start the generator

The push-button start is located on the upper left side panel. Press the button for 2 seconds and release to start the generator.



7. Turn breaker ON/ Connect

The breaker is located on the right side of the front power panel. Flip the breaker up to allow the power to flow to the receptacles. Connect your devices to the receptacles on the front panel. Start with the largest loads first.

DuroMax

Starting the Generator Using Propane (Continued)

WARNING: WHEN USING THE GENERATOR WITH LPG, MAKE SURE THERE IS NO POSSIBLE IGNITION SOURCE CLOSE TO THE GENERATOR.

1. Before using, make sure all of the LPG connectors and hoses are well connected and sealed.
2. Connect electrical devices to the generator ONLY after the engine runs smoothly. (There may be remnant gasoline in the carburetor; and this can cause unsteady engine performance for several minutes)
3. If the propane gas leaks, shut off the LPG supply first and then quickly unplug or turn off any electrical devices powered by the unit.
4. When stopping the engine, unplug or turn off any electrical devices, turn off the main circuit breaker and then turn off the LPG supply. After the engine has stopped turn the battery switch to the “OFF” position.

CAUTION: Disconnect all electrical loads from the generator before attempting to start!

Propane Requirements



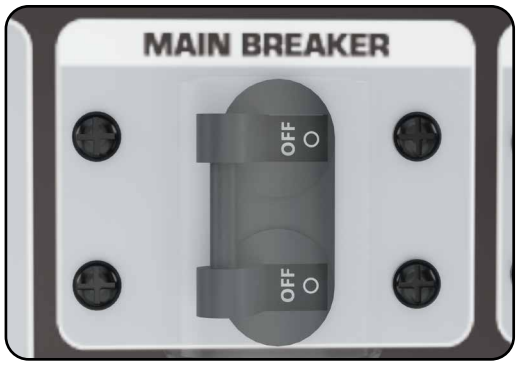
CAUTION: Always use the provided propane hose and regulator supplied with your generator. Failure to use the supplied regulator can damage your generator and void your warranty.

Note: Required fuel pressure to provided propane hose and regulator at all load ranges needs to be a minimum of 3 PSI.

Model Number	XP17500HX
Minimum Recommended Propane Tank Size	60 lbs.
BTU/Hr at Full Load	261,250 BTU/Hr

STARTING THE GENERATOR (CONTINUED)

Starting the Generator Using Recoil Start



1. Shut main breaker OFF

The breaker is located on the upper right side of the front power panel. Flip the breaker down to prevent accidental load when starting the generator.



2. Select your fuel

If using gasoline, see step 2 on pg. 32. If using propane see steps 2-4 on pg. 34.

Note: Starting on LPG will be difficult using the recoil start.



3. Turn battery switch ON

The battery switch is located to the right of the start button on the generator panel. Turn the switch "ON" to allow power to the push-button start.



4. Pull the recoil start

The recoil start is located on the left side panel next to the air filter. Pull the recoil handle slowly until resistance is felt, then quickly pull the recoil handle until fully extended.

CAUTION: Release the recoil handle only after the cord has retracted. Releasing the recoil handle while extended may cause harm to yourself or your equipment.



5. Turn breaker ON/ Connect

The breaker is located on the right side of the front power panel. Flip the breaker up to allow the power to flow to the receptacles. Connect your devices to the receptacles on the front panel. Start with the largest loads first.

DuroMax

STARTING THE GENERATOR (CONTINUED)

Starting the Generator Using Remote Start



1. Flip main breaker ON

The breaker is located in the top right of the front power panel. Flip the breaker up to allow the power to flow to the receptacles.



2. Select your fuel

If using gasoline, see step 2 on pg. 32. If using propane see steps 2-4 on pg. 34.



3. Turn battery switch ON

The battery switch is located to the right of the start button on the generator panel. Turn the switch “ON” to allow power to the push-button start.



4. Push the start button

The remote start has two buttons, ON and OFF. Press the ON button start the generator.

DuroMax



USING THE GENERATOR

If this is not your first time using the generator there are still steps you should take to prepare it for operation each time you use it.

IMPORTANT: At this point you should be familiar with the procedures described in the first portion of this section entitled “GENERATOR SETUP” If you have not yet read this section, go back and read it now.

AC Usage

- You may connect electrical devices running on AC current according to their wattage requirements.
- The chart below shows the rated and surge wattage of your generator according to its model number.
- The rated wattage corresponds to the maximum wattage the generator can output on a continuous basis.
- The surge wattage corresponds to the maximum amount of power the generator can output for a short period of time. Many electrical devices such as refrigerators require short bursts of extra power, in addition the rated wattage listed by the device, to stop and start their motors. The surge wattage ability of the generator covers this extra power requirement.

Fuel Source	Rated (Running) Wattage	Surge (Peak) Wattage
Gasoline	13,750	17,500
Propane	13,000	16,500

The total running wattage requirement of the electrical devices connected to the generator should not exceed the rated wattage of the generator itself. To calculate the total wattage requirement of the electrical devices you wish to connect, find the rated (or running) wattage of each device. This number should be listed somewhere on the device or in its instruction manual.

If you cannot find this wattage, you may calculate it by multiplying the voltage requirement by the amperage drawn: Watts = Volts x Amps. If these specifications are not available you may estimate the Watts required by your device by using the chart on the next page.

Once you have found the rated wattage requirement of each electrical device, add these numbers to find the total rated wattage you wish to draw from the generator. If this number exceeds the rated wattage of the generator, DO NOT connect all these devices. Select a combination of electrical devices, which has a total rated wattage lower than or equal to the rated wattage of the generator.

Tool or Appliance	Rated (Running) Watts	Additional Surge Watts
Electric water heater (40 gal)	4000	0
Hot plate	2500	0
Radial arm saw	2000	2000
Electric stove	1500	0
Circular saw	1500	1500
Air compressor (1 HP)	1500	3000
Window air conditioner	1200	1800
Miter saw	1200	1800
Microwave	1000	2000
Well water pump	1000	1500
Reciprocating saw	960	1040
Sump pump	800	1200
Refrigerator freezer	800	1200
Furnace blower	800	1300
Computer	800	0
Electric drill	600	900
Television	500	0
Deep freezer	500	800
Garage door opener	480	600
Stereo	400	0
Box fan	300	600
Clock radio	300	0
Security system	180	0
DVD player	100	0
Common light bulb	75	0

CAUTION: The generator can only run at its surge wattage capacity for a very short time. Connect only electrical devices requiring a rated (running) wattage equal to or less than the rated wattage of the generator. Never connect devices requiring a rated wattage equal to the surge wattage of the generator.

NOTE: The above wattage figures are estimates only.
Try to check the wattage listed on your electrical devices before consulting this chart.


DuroMax
DUAL FUEL
XP17500HX

Connecting the Generator to a Home



Interlock kit

- Choose what circuits you want to run.
- Requires an electrician to install, but you have the flexibility of switching up your circuits depending on your power needs.
- More hands-on, and some electrical knowledge is needed so you don't overload the generator.



Transfer switch

- Automatically switches power over to your generator during an outage. Requires an electrician to install.
- Once you choose which circuits you want to power, you're locked into your configuration.



Extension cords

- The most straightforward and affordable option.
- Zero commitment, no installation needed: Simply plug in your appliances and go!
- Perfect for renters, RV/camping trips, and power on the job-site.

Connecting a Load to the Generator

NOTE: Be sure to attach devices to the correct receptacle (outlet).

- 120V devices can be directly connected to the 120V ONLY receptacles.
- 120V devices can be connected to the 120/240V receptacle using an appropriate adapter.
- 240V devices can ONLY be connected to the 240V receptacle.

CAUTION: Do not connect 50 Hz or 3-phase loads to the generator.



1. Plug in devices

Plug in devices to the appropriate receptacle. When using the generator in 120/240V mode, balance the load as closely as possible. Placing more load on one side of the circuit will reduce the breaker trip period.



2. Turn breaker ON

Flip the circuit breaker up to the on position to allow power to the receptacles.



3. Turn on connected devices

Start or turn on appliances starting with the biggest loads first.

Choosing the Right Power Cord

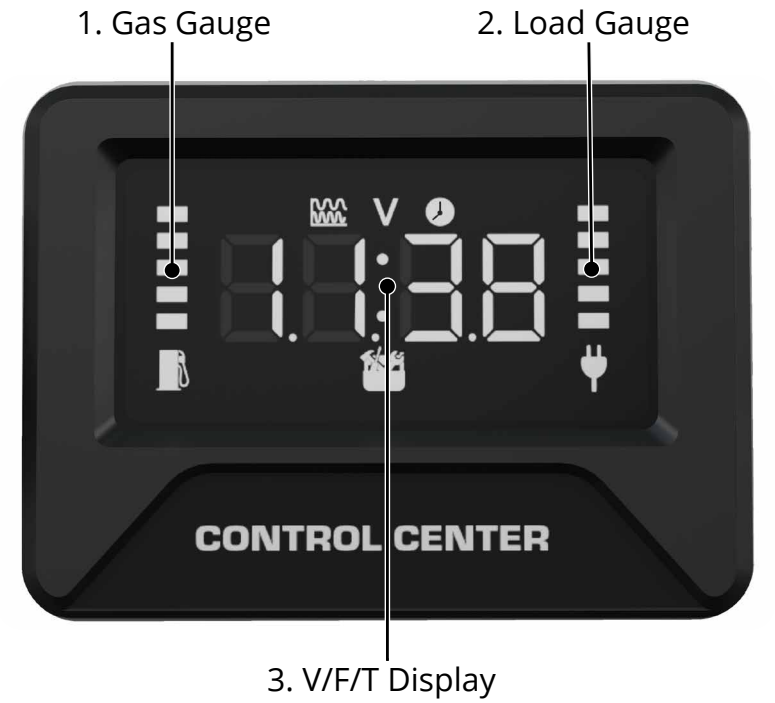
Long or thin cords can drain the power provided to an electrical device by the generator. When using such cords, allow for a slightly higher rated wattage requirement for the electrical device. See the table below for recommended cords based on the power requirement of the electrical device.

DEVICE REQUIREMENTS		WIRE GAUGE BY LENGTH (ft.)				
AMPS	**WATTS (120/240V)**	**10**	**25**	**50**	**100**	**150**
5	**600/1200**	18	16	14	12	10
10	**1200/2400**	16	14	12	12	10
15	**1800/3600**	14	14	12	12	10
20	**2400/4800**	12	12	12	10	10
25	**3000/6000**	12	10	10	10	8
30	**3600/7200**	10	10	10	8	NR
40	**4800/9600**	8	8	6	6	NR
50	**6000/12000**	6	6	6	NR	NR
***NR = NOT RECOMMENDED**		***Gauge based on twisted copper wire**				

From home back up to just running your electric edger and everything in-between DuroMax has the power cord for you. All DuroMax cords are 100% twisted copper wire for maximum life and reliability.

Length	**120V 15A**				**240V 30A**	**240V 50A**
	12 Gauge		**10 Gauge**			**6 Gauge**
	Single Outlet	**Triple Outlet**	**Single Out-let**	**Triple Out-let**	**L14-30P/ L14-30R**	**14-50P/ CS6364**
10 ft					XP3010GC	
15 ft						XP5015GC
25 ft	XPC12025A, XPX12025A	XPC12025C, XPX12025C	XPC10025A, XPX10025A	XPC10025C, XPX10025C	XP3025GC	XP5025GC
50 ft	XPX12050A	XPC12050C, XPX12050C	XPC10050A, XPX10050A	XPC10050C, XPX10050C	XP3050GC	XP5050GC
100 ft	XPC12100A, XPX12100A	XPC12100C, XPX12100C	XPC10100A, XPX10100A	XPC10100C, XPX10100C		

Using the Digital Multimeter



1. **Gas Gauge** – The gasoline fuel level in the fuel tank is shown on the left side of the control center.
2. **Load Gauge** – The amount of power currently being used is shown on the right hand side of the control center.
3. **V/F/T Display** - The display rotates between: Voltage - The voltage currently produced by the generator in volts; Frequency - The frequency currently produced by the generator in Hz; and Time - The number of hours the engine has been run.

Using the Battery Tender



The generator battery can steadily lose charge during longer periods of storage. Plug the provided trickle charger in to ensure your battery is maintained and ready for use if needed.

CAUTION: Avoid allowing the 12V battery to drop below 11.6V of charge, this can cause permanent damage to the battery cells.



Connect the battery tender

a. The battery tender outlet is located to the right of the LPG/NG inlet. Connect the battery tender cord to the battery tender outlet.
b. Connect the other end of the battery tender to a standard 120V wall outlet.

Syncing the Remote



If the remote control loses connection to the generator use the following instructions to resync the remote.

Note: The entire sync process needs to be completed within 1 minute of starting the sync or the process will need to be started over again.



1. Quickly press start button

a. Quickly press the push start button on the panel 5 times for less than 2 seconds on each push, and the interval should not exceed 5 seconds each time.



2. Engage remote buttons

a. Press the OFF button on the remote. The red light will blink indicating the prior controller settings were cleared.
b. Press the ON button on the remote. The red light will blink indicating that the controller is now synced.



3. Hold the start button

a. Press and hold the push button on the left panel for 5 seconds until the red light turns off to end sync mode.

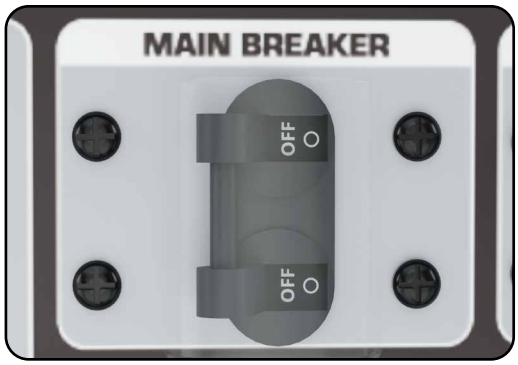


STOPPING THE GENERATOR

This section will cover the recommended shut off procedure for stopping the generator on various fuels.

STOPPING THE GENERATOR

Shutting Down the Generator On Gasoline



1. Shut main breaker OFF

The breaker is located on the upper right side of the front power panel. Flip the breaker to the OFF position.



2. Run the generator

Allow the generator to run for 3-5 minutes.



3. Hold push button to stop

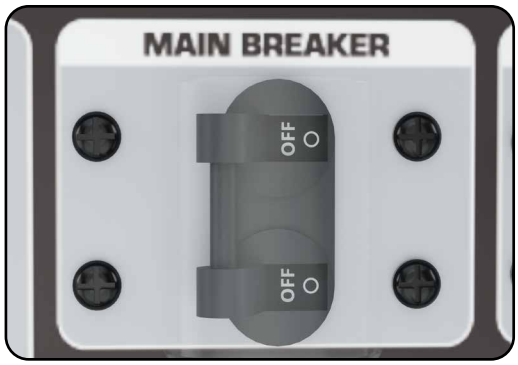
Hold push button for 3 seconds to shut the generator down.



4. Turn battery switch OFF

Turn the battery switch to the OFF position.

Shutting Down the Generator On Propane



1. Shut main breaker OFF

The breaker is located on the upper right side of the front power panel. Flip the breaker to the OFF position.



2. Run the generator

Allow the generator to run for 3-5 minutes.



3. Hold push button to stop

Hold push button for 3 seconds to shut the generator down.

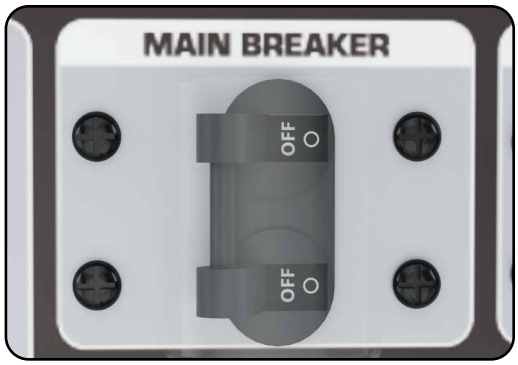


4. Close tank valve and turn off

Turn your propane tank valve to the CLOSE position and shut the battery switch OFF.

STOPPING THE GENERATOR (CONTINUED)

Shutting Down the Generator With the Remote



1. Shut main breaker OFF

The breaker is located on the upper right side of the front power panel. Flip the breaker to the OFF position.



2. Run the generator

Allow the generator to run for 3-5 minutes.



3. Hold the OFF button

Hold the OFF button to shut off the generator.



4. Turn battery switch OFF

Turn the battery switch to the OFF position.



MAINTENANCE AND CARE

Proper maintenance and storage of your generator is essential to ensure trouble free use of your generator when you need it.

By following the maintenance and care requirements, you can keep your generator running smooth and efficient for years to come.

MAINTENANCE AND CARE

Proper routine maintenance of your generator is essential for safe, economical, and trouble-free operation. It will also help reduce air pollution.

WARNING: Improper maintenance, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously injured or killed. Always follow the inspection, maintenance recommendations, and schedules in this instruction manual.

- Make sure the engine is off before you begin any maintenance or repairs.
- Let the engine and exhaust system cool before touching.
- To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.

Maintenance Schedule

Remember that this schedule is based on the assumption that your machine will be used for its designed purpose. Sustained high-load, high-temperature operation, or use in unusually wet or dusty conditions, will require more frequent service.

SERVICE	EVERY USE	1ST MO. OR 8 HRS. (BREAK IN)	EVERY 3 MO. OR 50 HRS. OF HEAVY USE	EVERY 6 MO. OR 100 HRS. OF NORMAL USE	EVERY 12 MO. OR 300 HRS.	EVERY 3 YRS. OR 500 HRS.
ENGINE OIL	*CHECK*	*CHANGE*	*CHANGE*	*CHANGE*		
AIR CLEANER	*CHECK*	*CHECK*	*CHANGE*	*CHANGE*		
SEDIMENT CUP			*CLEAN*	*CLEAN*		
SPARK PLUG			*CLEAN / ADJUST*	*CLEAN / ADJUST*		
SPARK ARRESTOR	*CHECK*				*CLEAN*	
VALVE CLEARANCE					*CHECK / ADJUST*	
FUEL TUBE	*CHECK*				*CHECK / REPLACE*	
FUEL TANK / FILTER					*CLEAN*	
COMBUSTION CHAMBER						*CLEAN*

Break-In Period

As the best practice for any new combustion motor it's recommended to perform the break in procedure as follows:

- Run the generator for the first 6-8 hours on conventional oil, then change the oil. After the break-in period synthetic oil may be used.
- During the break in period of the first 6-8 hours keep the generator load under 50% for optimal results.
- Check and clean the air filter if necessary after the break-in period.

Maintenance Log

As a best practice it's recommended to keep a log of the generator hours and maintenance to ensure your generator is always operating to its full potential.

Date	Generator Hours	Maintenance Performed

Checking the Oil





Check the oil

The generator is equipped with an automatic shutoff to protect it from damage due to low oil. Nonetheless, you should check the oil level of the engine before each use to ensure that the engine crankcase has a sufficient amount.

To check the oil level:

a. Make sure the generator is on a level surface.

b. Remove the oil cover.

c. Unscrew the oil filler/dipstick cap.

d. With a dry cloth, wipe the oil off of the stick on the inside of the cap.

e. Insert the dipstick without screwing the stick back in. There should now be oil on the stick. If there is no oil on the stick, or oil only at the very end of the stick, you should add oil until you can see oil to the end of the hash marks on the dipstick.

f. Be sure to replace the cap when finished checking oil.

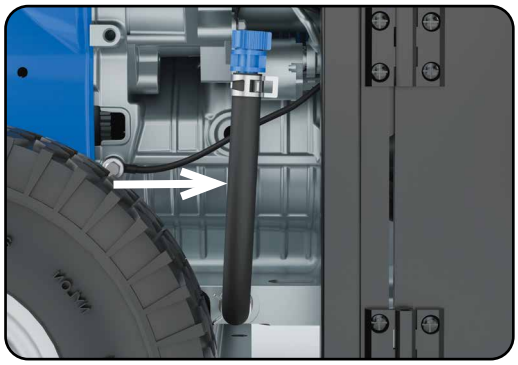
Model Number	XP17500HX
Engine Oil Capacity	43.96 fl. oz (1.3 L)

Changing the Oil



CAUTION: Worn out or dirty oil does not cool the generator properly and can lead to catastrophic engine damage.

In addition to regular oil changes, it is necessary to drain the oil from the crankcase if it has become contaminated with water or dirt.



1. Locate oil drain hose

The oil drain hose will located near the oil fill cap. Lead the oil drain hose out from the engine block and place the end in approved oil disposal container.



2. Unscrew cap and drain oil

Unscrew the oil drain cap and drain oil into an approved oil disposal container. Contact your local auto parts store for information on oil disposal.



3. Replace drain plug/Add Oil

Replace the oil drain plug and tighten. Add 43.96 fl. oz of oil into the crankcase as shown in the “Add Oil” section on page 25.

Cleaning the Air Filter



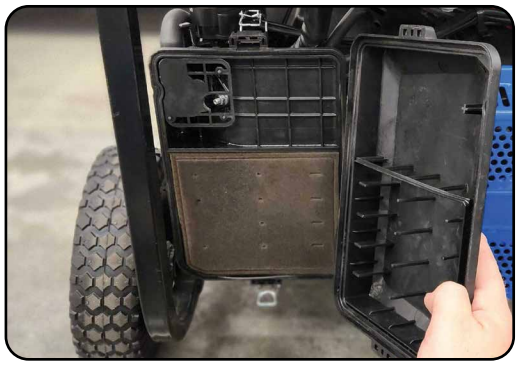
Routine maintenance of the air cleaner helps maintain proper airflow to the carburetor. Check that the air cleaner is free of excessive dirt after every use.

CAUTION: Improper maintenance may cause less air to enter the engine or dirty air to enter the engine causing overheating and engine wear.



1. Unclip air filter cover

Unclip the air filter cover located on the top and bottom of the air filter.



2. Remove filter cover

Remove the air filter cover.



3. Remove element and clean case

Remove air filter element and wipe the dirt from inside the empty air cleaner casing.



4. Wash cleaner element

Wash the sponge-like elements in household dish detergent and warm water.



5. Dry cleaner element

Pat dry on a dry cloth and allow the elements to dry completely.



6. Add engine oil to elements

Soak the dry elements in a small amount of engine oil. Ring out any excess oil.



7. Replace elements in casing

Replace the sponge-like elements in the air cleaner casing and replace the cover.

Spark Plug Maintenance



The spark plug is important for proper engine operation. A good spark plug should be intact, free of deposits, and properly gapped.

CAUTION: Improper maintenance may cause reduced fuel economy, misfires, trouble starting, or damage to the spark plug threads.



1. Remove spark plug cap

Pull on the spark plug cap to remove it.



2. Remove spark plug

Unscrew the spark plug from the generator using the spark plug wrench included with this product.



3. Inspect spark plug

Visually inspect the spark plug. If it is cracked or chipped, discard and replace it with a new spark plug. We recommend using an NGK BPR6ES.



4. Measure plug gap

Measure the plug gap with a gauge. The gap should be 0.7-0.8 mm (0.028-0.031 in).



5. Clean and re-gap

If you are re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base and then re-gap the spark plug.



6. Install spark plug

Screw the spark plug back into its place on the generator using the spark plug wrench.



7. Replace spark plug cap

Replace the spark plug cap.

Emptying the Gas Tank



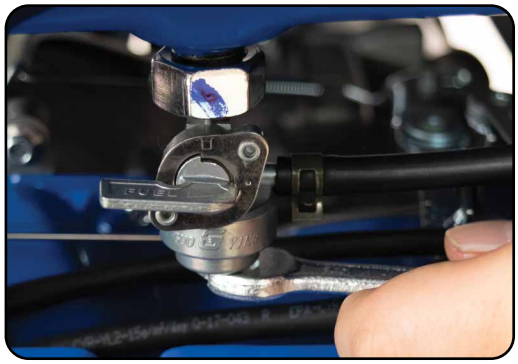
If you have been using gasoline in your generator, before storing your generator for extended periods of time you should drain your generator fuel tank of gasoline.

CAUTION: Do not store fuel from one season to another. Gasoline sold at the pump today contains additives such as ethanol that even when stored properly may damage the fuel system components.



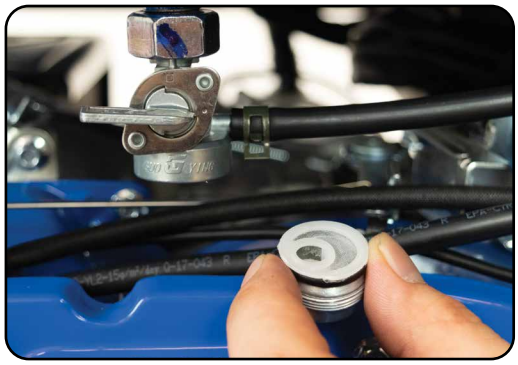
1. Turn gas valve OFF

The gas valve is located above the recoil starter. Rotate the valve clockwise to the vertical position to stop the flow of gasoline to the carburetor.



2. Remove fuel filter cup

Remove the fuel filter cup.



3. Empty fuel filter cup

Empty the fuel filter cup of any fuel.



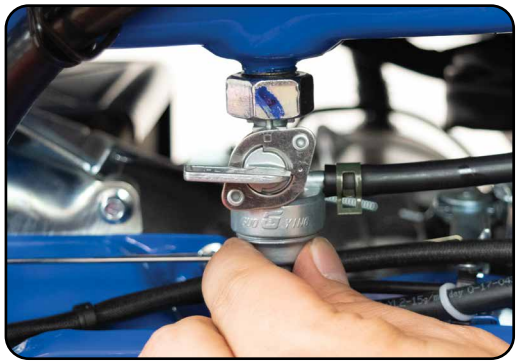
4. Drain gas from the generator

With a funnel underneath the fuel valve to catch the gas, turn the fuel valve to the “ON” position. Drain all the gas from the generator.



5. Shut fuel valve OFF

Once the gasoline is fully drained, move the fuel valve back to the “OFF” position.



6. Replace fuel filter cup

Reinstall the fuel filter cup.



7. Store emptied gas

Store the emptied gasoline in a suitable place and add fuel stabilizer to keep fuel fresh and usable.

Transporting the Generator



1. Empty the gas tank

Fully drain your gas tank as shown in “Emptying the Gas Tank” on page 70-71.



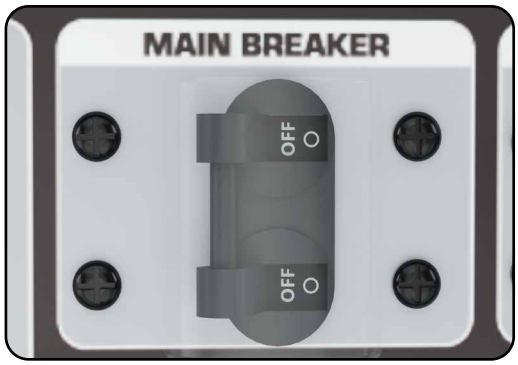
2. Disconnect the spark plug cap

Pull on spark plug cap to disconnect spark plug from ignition wire.

CAUTION: Do not obstruct any ventilation openings and keep the generator in a cool dry area.

CAUTION: Never place any type of storage cover on the generator while it is still hot.

Storing the Generator for Use Within 30 Days



1. Turn breaker OFF and run

Turn OFF the main breaker and allow the generator to run for 3-5 minutes.



2. Shut fuel valve OFF and run dry

Shut the fuel valve “OFF” and allow generator to run until it stalls out.



3. Turn the battery switch OFF

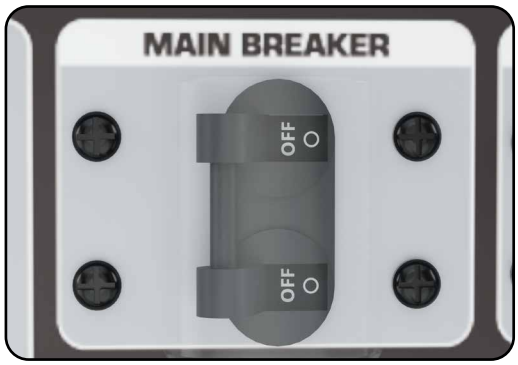
Turn the battery switch to the “OFF” position.



4. Add fuel stabilizer and store

Add fuel stabilizer to gas remaining in tank, and store generator.

Storing the Generator for Longer Than 30 Days



1. Turn breaker OFF and run

Turn OFF the main breaker and allow the generator to run for 3-5 minutes.



2. Shut fuel valve OFF and run dry

Shut the fuel valve “OFF” and allow generator to run until it stalls out.



3. Turn the battery switch OFF

Turn the battery switch to the “OFF” position.



4. Empty the gas tank

Fully drain your gas tank as shown in “Emptying the Gas Tank” on page 70-71.



5. Drain the carburetor

Remove drain bolt from carburetor and drain small amount of fuel in carburetor bowl.



6. Remove spark plug

Remove spark plug as shown in “Spark Plug Maintenance” on page 68.



7. Add oil to cylinder

Add 2 tablespoons of 10W-30 motor oil directly into the spark plug hole, and pull the recoil to lubricate cylinder. After lubricating cylinder reinstall the spark plug.



8. Connect the battery tender

Connect battery tender and leave plugged in to maintain the battery while in storage, as shown on “Using the Battery Tender” on page 51.

SPECIFICATIONS

Model Number	XP17500HX
AC Rated Wattage (Gasoline)	13,750 W
AC Rated Wattage (Propane)	13,000 W
AC Surge Wattage (Gasoline)	17,500 W
AC Surge Wattage (Propane)	16,500 W
AC Rated Voltage	120/240V
Frame Dimensions	29.25”L x 22”W x 25.5”H
Weight	245 lbs
Recommended Oil	10W-30
Engine Displacement	600 cc
Gasoline Capacity	11.9 gal
Oil Capacity	43.96 fl. oz. (1.3 L)
Bore	96 mm
Stroke	82.5 mm
Engine Speed	3600 rpm ±100 rpm
Oil Cooling Type	Splash
Cylinder Sleeve	Cast iron sleeve
Fuel Delivery System	Carburetor
Valve Type	OHV
Engine Type	4-Stroke
Engine Cooling Type	Forced air
Runtime @ 25% Load (Gasoline)	15 hrs.
Runtime @ 50% Load (Gasoline)	10 hrs.
Runtime @ 25% Load (Propane)	24 hrs (60 lbs)
Runtime @ 50% Load(Propane)	10.3 hrs. (60 lbs)
Starting Type	Electric/ Recoil
Noise Level	77 dB
Neutral System	Bonded
Total Harmonic Distortion (THD)	<5%
AC Rated Frequency	60 Hz
AC Phase	Single
Winding Material	100% copper windings
Suggested Propane Tank Size	60 lbs. minimum



TROUBLESHOOTING

This section of the manual is to help you troubleshoot problems with your generator.

TROUBLESHOOTING

Mode	Description	Solution
Engine will not start.	Battery not charged.	Connect battery to battery charger and once fully charged try starting with battery.
	Engine switch is in the “OFF” position.	Turn engine switch to the “ON” position.
	Old gasoline or water in gasoline.	Drain entire fuel system and refill with fresh fuel. See page 70 for instructions on draining fuel.
	Generator is out of fuel.	Add gasoline or replace propane tank.
	Fuel valve is in the “OFF” position.	Rotate fuel valve to the “ON” position.
	Dirty or faulty spark plug.	Clean spark plug or replace. See page 68 for instructions on cleaning and replacing spark plug.
	Spark plug wire is loose.	Ensure the spark plug cap is secured on the spark plug.
	Generator is not level.	Move generator to a level surface.
	Oil is low.	Add add or change oil. See page 65 for changing oil.
	The generator is flooded with fuel.	Allow the generator to sit for 10 minutes before attempting to restart.
	CO Alert module has been tampered with or removed.	Reinstall the CO Alert module or contact technical support.
	Attempting to run gasoline while the propane hose is connected.	The generator will automatically switch to propane if gas pressure is detected. Remove the propane hose from the generator to start on gasoline.

Mode	Description	Solution
Generator starts but runs roughly.	Spark arrestor dirty or clogged.	Clean the spark arrestor located in the muffler tailpipe.
	The air cleaner is dirty.	Clean or replace the air filter element. See page 66 for further instructions on cleaning or changing the air filter.
	Old gasoline or water in gasoline.	Drain entire fuel system and refill with fresh fuel. See page 70 for instructions on draining fuel.
	Propane tank is running empty or freezing.	Refill propane tank or upgade to a larger size tank.
Generator will not electric start.	Battery not charged.	Connect battery to battery charger and once fully charged try starting with battery.
	Battery not connected.	Ensure both halfs of the battery connector are fully connected. See page 24 for further details.
Generator shuts down while running.	CO Alert is triggering with a red illuminated light.	Move the generator to an open well ventilated location. Ensure exaust is pointed away from people or buildings. Make sure the generator is at least 5 feet away from any obstructions in the vacinity. Ensure the exhaust if facing down wind.
	CO Alert is triggering with a solid yellow illuminated light.	Contact technical support for further assistance.
	Generator is out of fuel.	Add gasoline or replace propane tank.
	Oil is low.	Add add or change oil. See page 65 for changing oil.
	Spark arrestor dirty or clogged.	Clean the spark arrestor located in the muffler tailpipe.

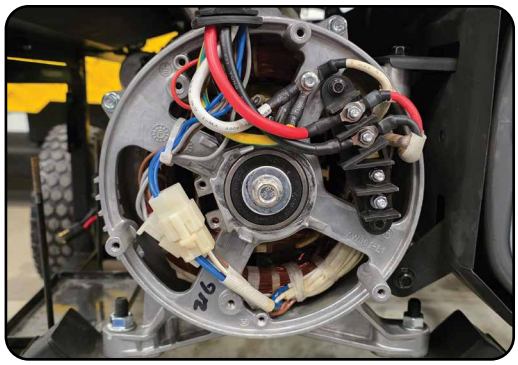
TROUBLESHOOTING (CONTINUED)

Mode	Description	Solution
Generator runs, but there is no electrical output	Main circuit breaker is in the “OFF” position.	Flip the main circuit breaker in the “ON” position.
	GFCI is tripped.	Reset the GFCI receptacles by pushing the TEST button in the center of the GFCI receptacles, then press the RESET button.
	Button breakers are tripped.	Reset the button breakers by pushing them.
	Wiring connection loose.	Inspect connected wires and ensure the connections are properly secured.
	Cord connection loose or bad.	Check that the connected cords are fully connected and replace cords if faulty or damaged.
Generator runs, but does not support all electrical devices connected	Generator overloaded.	Reduce the AC load on the generator.
	Device connected to generator is bad.	Disconnect malfunctioning device.
	The air cleaner is dirty.	Clean or replace the air filter element. See page 66 for further instructions on cleaning or changing the air filter.

For other issues not listed, please contact our technical support department at:

844-DuroMax (844-387-6629) or Support@DuroMaxPower.com

Changing/Inspecting the Carbon Brushes

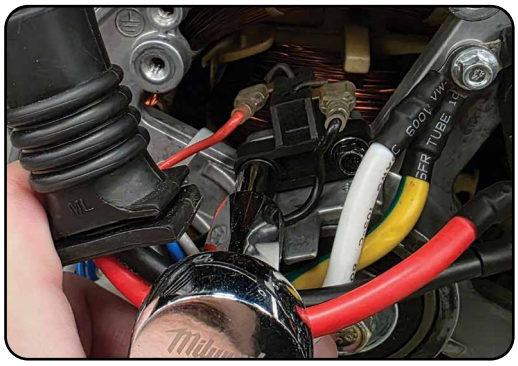


The carbon brushes in conjunction with the AVR regulates power from the generator. The carbon brushes are wearable parts and should be inspected every 250 running hours.



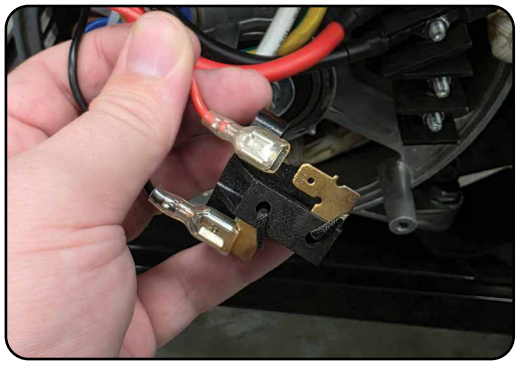
1. Remove generator cover

Remove the 3 bolts of the generator cover then pull the cover off the generator.



2. Remove bolts from brush

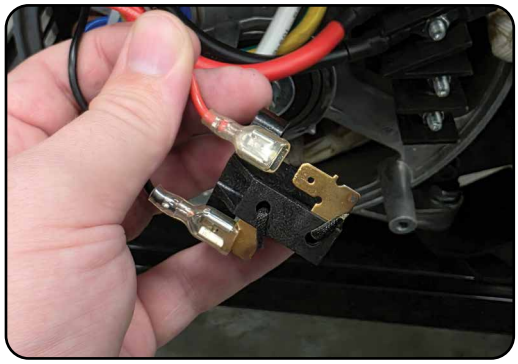
Remove the bolts holding the carbon brush.



3. Disconnect brush wires

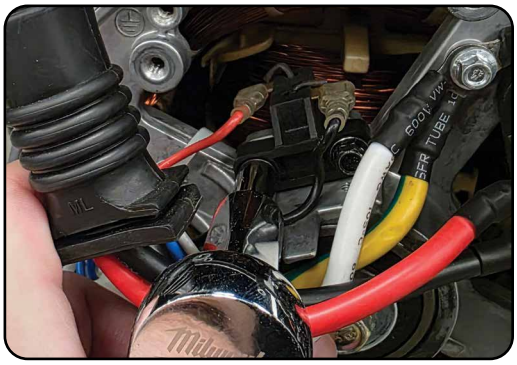
Remove the two wires on the carbon brush.

Changing/Inspecting the Carbon Brushes (Cont.)



4. Install wires on new brush

Insert and connect the 2 brush wires on the new brush assembly, be sure to connect the red and black wires on the same prongs as the prior brush assembly.



5. Install new brush assembly

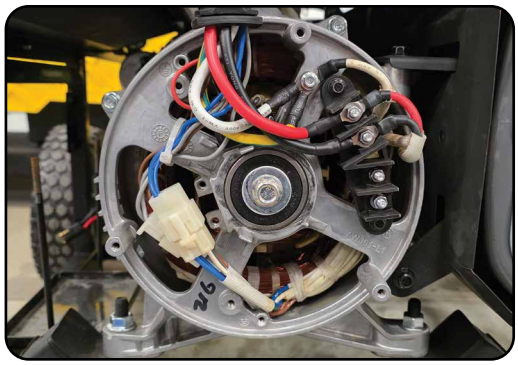
Replace the new brush assembly in the same position as the original and install both bolts.



6. Replace generator cover

Replace the end cover on the end of the generator and install the 3 bolts on the cover.

Changing/Inspecting the AVR



The carbon brushes in conjunction with the AVR regulates power from the generator. The carbon brushes are wearable parts and should be inspected every 250 running hours.



1. Remove bolts around panel

Remove the 4 bolts located on each corner of the control panel.



2. Lean panel forward

Lean panel forward to expose the AVR.



3. Remove the AVR bolts

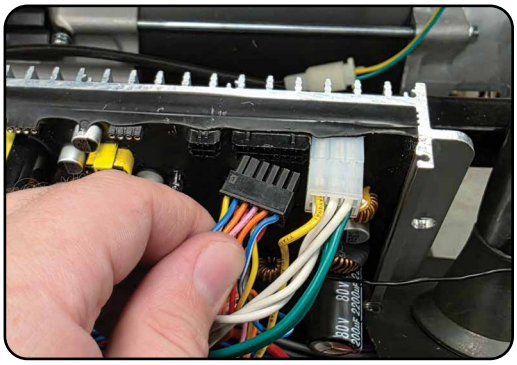
Remove the 2 AVR bolts.

Changing/Inspecting the AVR (Cont.)



4. Pull AVR forward

Pull AVR forward to expose the wire clips. Avoid putting tension on any of the wire clips when pulling the AVR forward.



5. Unclip the AVR wires

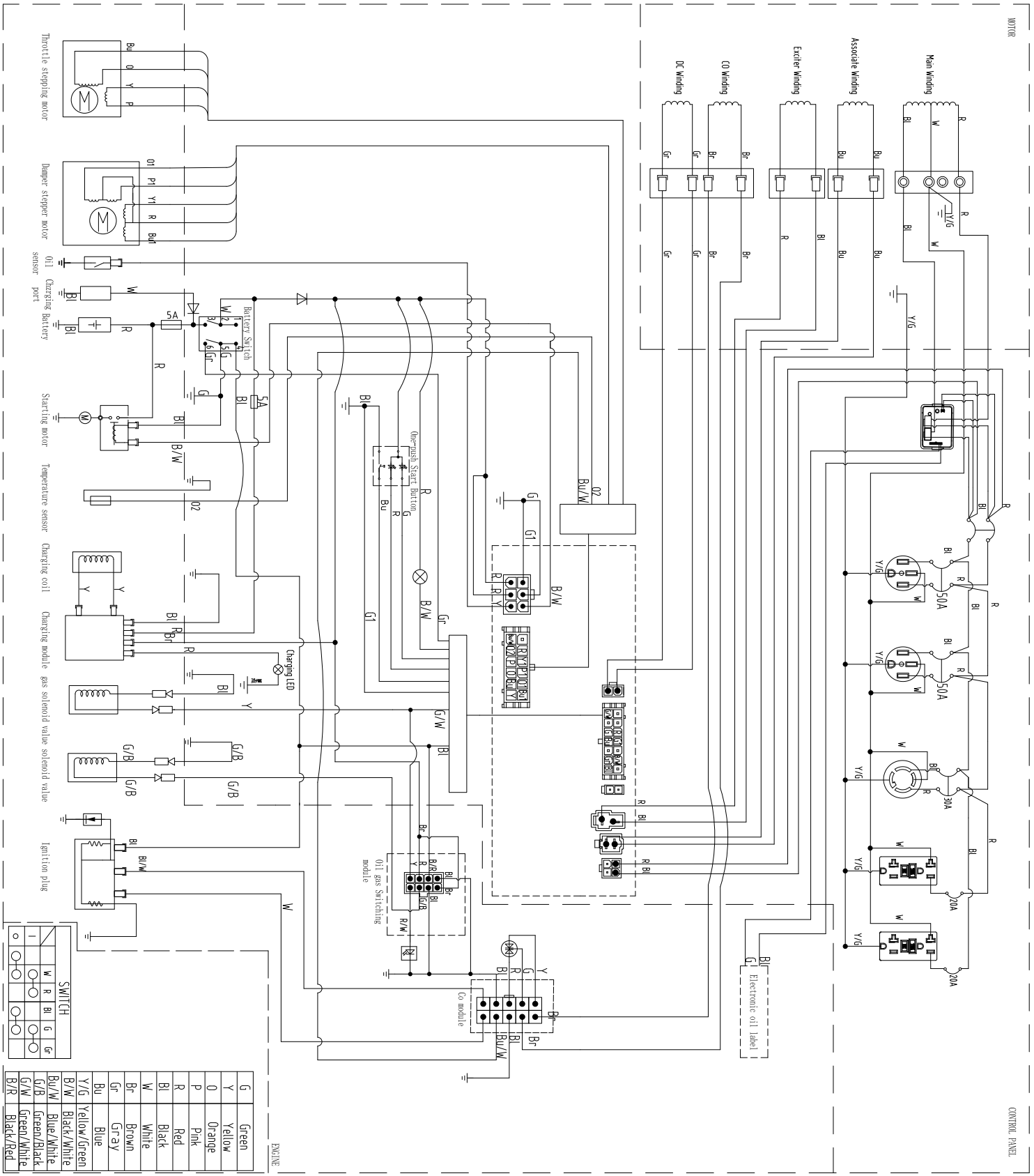
Unclip all the AVR wires. Keep note of the wire locations.



6. Replace generator cover

Replace the end cover on the end of the generator and install the 3 bolts on the cover.

WIRING DIAGRAM



G	Green
Y	Yellow
O	Orange
P	Pink
R	Red
Bl	Black
W	White
Br	Brown
Gr	Gray
Bu	Blue
Y/G	Yellow/Green
B/W	Black/White
Bu/W	Blue/White
G/B	Green/Black
G/W	Green/White
B/R	Black/Red

WARRANTY

5-year Warranty

All DuroMax Power Equipment warrant the original purchasers to a 5-year Parts Warranty (Residential Use ONLY: Unusually heavy or commercial use is covered for a period of 1-year) in the event of failure due to defects in electrical or mechanical components. Freight on any items submitted for replacement or repair under the Warranty is the responsibility of the equipment owner. This warranty is non-transferable and only valid to the original purchaser.

Warranty Exclusions

The DuroMax Power Equipment warranty does not cover repairs or returns when the fault is: Normal Wear and Tear, Installation Use or Maintenance Services, Cosmetic defects, Accessories, Failures due to acts of God or Natural Disasters, or problems related to/from aftermarket or non-OEM parts.

Warranty Limitations

DuroMax Power Equipment does not claim or hold any obligation to loss of time, freight charges, use of the product, or any incidental damages from the use of this product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED.

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The United States Environmental Protection Agency and DuroMax Power Equipment, are pleased to explain the emission control system warranty on your 2026/2027 model year small off-road engine/equipment. In the United States, new small off-road engine/equipments must be designed, built and equipped to meet stringent anti smog standards. DuroMax must warrant the emission control system on your small off-road engine/equipment for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your small off-road engine/equipment.

Where a warrantable condition exists, DuroMax will repair your small off-road engine/equipment at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

This emissions control system is warranted for two years. If any emission-related part on your small off-road engine/equipment is defective, the part will be repaired or replaced by DuroMax.

OWNER'S WARRANTY RESPONSIBILITIES:

As the small off-road engine/equipment owner, you are responsible for the performance of the required maintenance listed in your owner's manual. DuroMax recommends that you retain all receipts covering maintenance on your small off-road engine/equipment, but DuroMax cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the small off-road engine/equipment owner, you should however be aware that DuroMax may deny you warranty coverage if your small off-road engine/equipment or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

If you have any questions regarding your warranty rights and responsibilities, you should contact DuroMax at 844-387-6629 or support@duromaxpower.com.

DEFECTS WARRANTY REQUIREMENTS:

(a) The warranty period begins on the date the engine/equipment is delivered to an ultimate purchaser.

(b) General Emissions Warranty Coverage. DuroMax warrants to the ultimate purchaser and each subsequent owner that the engine/equipment is:
(1) Designed, built, and equipped so as to conform with all applicable regulations adopted by the Environmental Protection Agency.

WARRANTY (CONTINUED)

(2) Free from defects in materials and workmanship that causes the failure of a warranted part for a period of two years.

(c) Warranty Parts for Exhaust Emission.
(1) Fuel System
(2) Air Induction System
(3) Ignition System

The following parts are also considered emission related components for exhaust emissions, if applicable
(1)Exhaust Gas Recirculation (EGR) System
(2) After treatment devices.
(3) Crankcase ventilation valves.
(4) Sensors.
(5) Electronic control units.

(d) Warranty Parts for Evaporative Emission include fuel tank, fuel cap, fuel line and fittings, carbon canister, vapor hoses. They may also include, if applicable, liquid/vapor separator, clamps, pressure relief valves, etc.

DuroMax will furnish with each new engine/equipment written instructions for the maintenance and use of the engine/equipment by the owner.

CUSTOMER SERVICE DEPARTMENT

DuroMax Power Equipment is committed to ensuring that our products perform when they need to. Our generators are your lifeline in the event of an emergency. Should you have any problems, please contact our customer service department:

DUROMAX POWER EQUIPMENT
5800 Ontario Mills Parkway
Ontario, CA 91764

Customer Service: 844-DuroMax
Customer Service Hours: 8-5 pm PST Mon-Fri

Website: DuroMaxPower.com
Email: customerservice@DuroMaxPower.com



5800 Ontario Mills Parkway
Ontario, CA 91764
United States

844-DuroMax

REV: XP17500HX-02172026