

*Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.*

# Dayton® Diesel Electric Generator

## Description

Dayton professional-duty generators are rugged and compact. These models provide dependable, trouble-free service. The alternators are brushless with revolving fields. Yanmar diesel engines provide long life under heavy use. These engines are governed to maintain engine speed of 3600 RPM under load. 3600 RPM engine speed provides 120/240V, 60 Hz power. Additional features include circuit breaker protection, spark-arresting muffler, large fuel tank, oil alert system, electric starter, and a pressurized lubrication system.

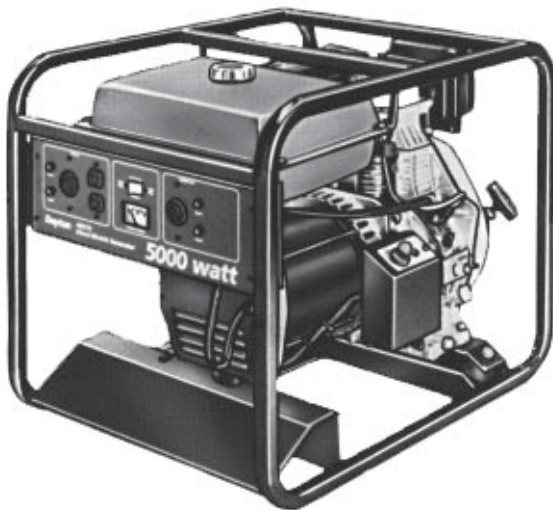


Figure 1 – Model 4W315C

## Unpacking

1. Remove generator from carton.
2. Remove any protective packaging applied to generator for shipment.
3. Check for loose or missing parts. Check for shipping damage. If any parts are missing or damaged, promptly inform dealer where you bought generator.
4. Battery cables are supplied. These cables are in a separate bag inside generator carton. You must install these cables to engine. See "Battery," page 7 for installation instructions.

# Dayton® Diesel Electric Generator

## Specifications

### ELECTRICAL SPECIFICATIONS

Rated Wattage*	Maximum VA	Rated Amperage 120V	Rated Amperage 240V
5000	6500	41.7	20.8

\* Single-phase, 1.0 power factor

**NOTE:** Ratings apply to SAE standard conditions. Reduce ratings 3 1/2% for each 1000 feet above sea level and 1% for each 10° Fahrenheit rise above 60°F.

### GENERAL SPECIFICATIONS

Yanmar Engine H.P.	Yanmar Model	Fuel Type	Fuel Tank Capacity	Oil Alert System	Electric Start	Weight (pounds)
10	L100	Diesel	4.2 gal.	Yes	Yes	241

### RECEPTACLE SPECIFICATIONS

120V Duplex	120V, 30-Amp Twist-Lock	120/240V, 20-Amp Twist-Lock	120V Full Power Switch
Yes	Yes	Yes	Yes

### ELECTRICAL COMPONENT SPECIFICATIONS

Stator Main Winding *	Resistance in Ohms		Rotor Secondary Winding †	Capacitor, MFD 450 Volt	Diodes (2) 800 Volt
	Stator Auxiliary Winding Δ	Rotor Primary Winding †			
0.54	1.38	0.61	2.29	50	70 Amp

(\*) Connect T2 (green) and T3 (black). Measure resistance between T1 (red) and T4 (yellow).

(Δ) Resistance between brown and white leads.

(†) Remove diodes to check resistance.

# Model 4W315C

## Product Identification

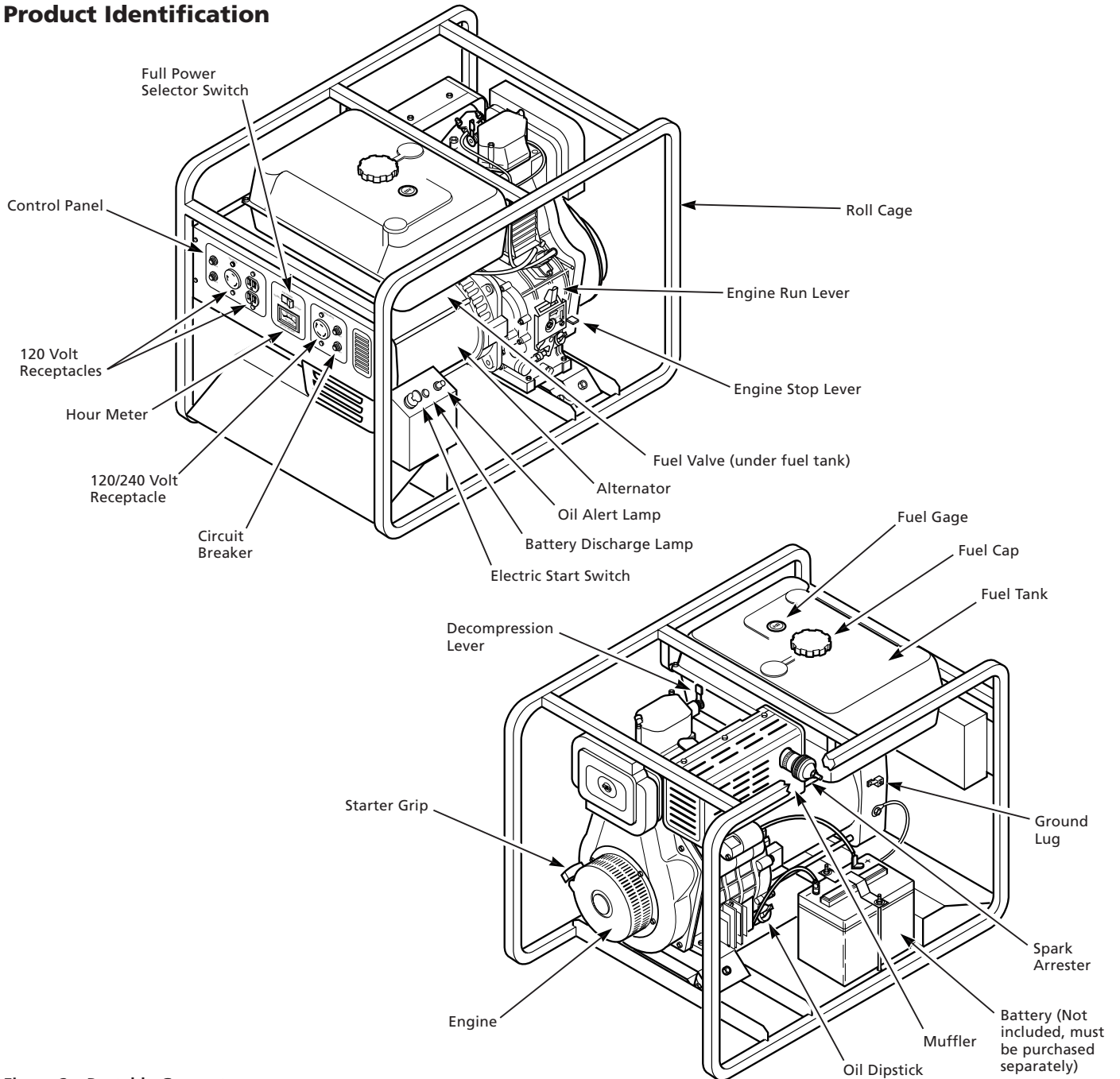


Figure 2 – Portable Generator

# Dayton® Diesel Electric Generator

## General Safety Information

**IMPORTANT:** Read these instructions and engine owner's manual carefully. Become familiar with generator before trying to operate or service it. Know its uses, limitations, and any hazards involved. Improper use of generator can cause severe injury or death from explosion, fire, burns, electrical shock, or carbon monoxide poisoning.

Make certain you read and understand all warnings. Keep these instructions for reference. They are your guide to safe and proper operation of this generator.

Safety information appears throughout these instructions. Pay close attention to them. Below are definitions for the safety information listed throughout this manual.

**▲ DANGER** Under this heading, installation, operating, and maintenance procedures or practices will be found that, if not carefully followed, WILL result in IMMEDIATE serious personal injury or death.

**▲ WARNING** Under this heading, installation, operating, and maintenance procedures or practices will be found that, if not carefully followed, COULD result in severe personal injury or death.

**▲ CAUTION** Under this heading, installation, operating, and maintenance procedures or practices will be found that, if not carefully followed, MAY result in minor personal injury, product or property damage.

**▲ DANGER** Engine exhaust contains poisonous carbon monoxide gas. Overexposure will cause loss of consciousness and will lead to death. Use only in well-vented areas. Make sure area has plenty of free-moving, fresh, outside air. Never run generator in an enclosed or confined area. Never run generator inside occupied building.

Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If you have these signs, get fresh air at once! Some people are more affected by carbon monoxide than others. These include pregnant women, persons with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

**▲ WARNING** Diesel fuel presents a hazard of fire. Diesel fuel is flammable.

- Keep fuel out of children's reach.
- Refuel generator in a well-vented area. Do not fill fuel tank in the dark. Do not refuel while engine is running. Unhook all electrical loads and shut off engine before refueling.
- Do not overfill fuel tank. Always allow room for fuel to expand. If you overfill tank, fuel can overflow onto hot generator. This can cause fire. After refueling, tightly close fuel tank cap.
- Do not spill fuel. If fuel spills, make sure area is dry before starting engine.
- Never smoke in refueling area. Never allow open flames or sparks in area.
- Store fuel in approved container. Store fuel in a well-vented area free of open flames or sparks.

**▲ WARNING** Guard against fire hazard. Keep operation area well-vented. Keep generator at least three feet away from any object. Do not place flammable objects near generator.

- Do not use generator where flammable vapors are present. Some vapors are heavier than air. These vapors settle in low-lying places.
- Do not use generator in enclosed spaces. This includes motor home or RV generator compartments.

**▲ WARNING** Guard against electric shock. Generator produces high voltage. This high voltage can cause severe electric shock. Only responsible adults should use the generator.

- Properly ground generator before starting.
- Never let anyone operate or service generator without proper instructions.
- Avoid contact with live terminals or bare wires.
- Do not use generator outdoors in rain or snow.
- Do not use generator near standing water or snow.
- Do not use if generator is wet or damp.
- Do not use generator in highly conductive areas. These areas include metal decking and steelwork.
- Only use grounded extension cords.
- Do not use any worn or damaged electric cords. Electric shock or damage to generator may result.
- On construction sites, you must use a Ground Fault Circuit Interrupter (GFCI). This helps guard against electric shock. OSHA and the National Electrical Code requires this.
- Do not wear damp clothing or wet shoes when using generator.

# Model 4W315C

## General Safety Information (Continued)

**▲WARNING** Guard against burns. Hot engine parts can cause severe injury. Use caution and remain alert when using generator.

- Keep children and animals away from generator while it is running or hot.
- Keep all covers and shields in place. Keep them tightly secured.
- The muffler becomes very hot during operation. The muffler remains hot for a while after shutdown. Do not touch muffler while it is hot. Do not let muffler touch anything flammable. Let engine cool before transporting or storing.

**▲WARNING** Have standby installation to home or building performed by a licensed electrician. Do not let anyone else wire into a utility circuit. Personal injury, equipment damage, or damage to home could occur.

**▲WARNING** Never connect generator to any existing electrical circuits. The generator output will back-feed into the utility power line. This may electrocute a power company line repair person. Also, if generator is powering electrical circuits, the chance of an electrical fire exists.

**▲WARNING** Battery gives off explosive gases. Keep sparks, flames, and cigarettes away. Do not remove or install battery cables when engine is cranking or running. Only service or use battery in a well-vented area.

**▲WARNING** Battery contains sulfuric acid. Battery acid is poisonous if swallowed. Contact with skin or eyes may cause severe burns. Do not tilt generator with battery installed. Tilting could cause battery acid to spill. Wear protective clothing and face shield when servicing. Keep out of children's reach.

**▲WARNING** Only a qualified electrical service person should service and repair generator.

- Generator produces high voltage. Use extreme caution when working on electrical parts.
- When working on generator, avoid hot muffler, exhaust manifold, and engine parts. Severe burns may occur.
- Do not work on generator when tired.
- Use only factory approved replacement parts.

**▲WARNING** Store generator in a well-vented area. Make sure fuel tank is empty. Never store with fuel in tank.

**▲CAUTION** Never operate generator

- if engine speed changes greatly
- if engine misfires often
- if powered items overheat
- if electrical output drops
- if it is sparking
- if it produces smoke or flames
- if it vibrates at high levels
- if it has a damaged receptacle

**▲CAUTION** Keep generator and nearby areas clean.

- Keep generator free of oil, mud, and other foreign matter.
- Remove anything that creates slippery areas around generator.
- Remove oily rags and other items that create fire hazards.
- Keep a fire extinguisher nearby. Make sure it is rated ABC by the NFPA. They are good for all uses. Consult your local fire department.
- Keep fire extinguisher well maintained. Be familiar with its use.

**▲CAUTION** Know how to stop engine quickly. Know how to use all controls.

**▲CAUTION** Prolonged exposure to loud noise can cause hearing loss.

- When working around generator, wear approved hearing protection.
- Remember neighbors when using generator.

## Generator Features OIL ALERT SYSTEM

The oil alert system protects the engine from low oil damage. This system automatically shuts down the engine and prevents engine restarting if the oil pressure falls too low.

If this system shuts down the engine, the engine will not start until you add oil. The oil alert lamp is near engine starter switch (See Figure 3, page 6). Add oil to engine (See "Engine Oil," page 8).

See engine owner's manual for more information.

# Dayton® Diesel Electric Generator

## Generator Features (Continued)

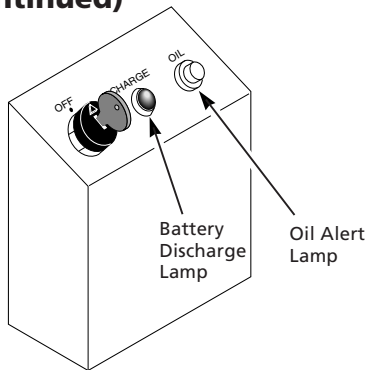


Figure 3 - Battery Discharge Lamp and Oil Alert Lamp Location

### BATTERY DISCHARGE LAMP

The battery discharge lamp (See Figure 3, above) will light if battery charger is not operating while engine is running. If this happens, the battery will not charge and will eventually run down. Have battery charging circuit repaired by authorized service person.

### FULL POWER SELECTOR SWITCH

The full power selector switch is on the control panel. The switch has two positions: 120 VOLT ONLY, and 120/240 VOLT.

**120 VOLT ONLY:** This position sends full power to the 120V receptacles only. 240V power is not available. Use this position when powering 120V items only.

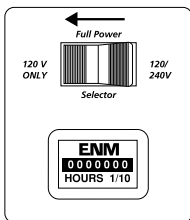


Figure 4 – Full Power Selector Switch in 120 Volt Only Position

**120/240 VOLT:** This position sends full power to the 120/240V receptacle. It also powers the 120V receptacles at reduced wattage capacity.

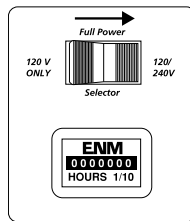


Figure 5 – Full Power Selector Switch in 120/240 Volt Position

**IMPORTANT:** Do not move the full power selector switch while powering electrical items. Unplug all items before moving switch. Failure to do so can damage switch.

### HOUR METER

The hour meter will measure the total run time of the generator, including all idle time. Hour meter is accurate up to 1/10 of an hour.

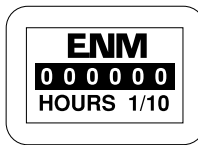


Figure 6 – Hour Meter

### ELECTRIC START

A battery is not supplied with generator. You must provide a 12-volt, 45-amp-hour battery. For more battery information, see "Battery," page 7.

### GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE

This generator has a 120-volt ground fault circuit interrupter (GFCI) receptacle. The GFCI receptacle is on the control panel. The GFCI protects you against hazardous

electrical shock caused when your body becomes a path through which electricity travels to reach ground. This could happen when you touch an appliance or cord that is 'live' through faulty mechanism, damp or worn insulation, etc.

When protected by the GFCI, you may still feel a shock, but the GFCI should cut it off quickly. A person in normal health should not receive serious injury.

**NOTE:** Infants and very small children may still be affected.

### TEST PROCEDURE

Check the GFCI receptacle every month. This insures it is working right.

1. Push black TEST button. Red RESET button should pop out. This should trip GFCI, resulting in no electrical power at receptacle. Verify this by plugging test lamp with good bulb into receptacle. If lamp does not work, GFCI receptacle is good.

**WARNING** If RESET button does not pop out, do not use the GFCI receptacle. Contact a qualified electrician for repairs.

2. If the GFCI receptacle tests okay, restore power by pushing the RESET button back in. The test lamp should work at this time.

**IMPORTANT:** You must press the RESET button firmly and fully. It should lock into place. If the GFCI does not lock into place, do not use receptacle. Contact a qualified electrician for repairs.

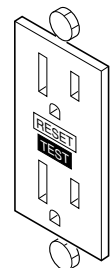


Figure 7 – GFCI Receptacle



# Model 4W315C

## Generator Features (Continued)

### RECEPTACLE CIRCUIT BREAKER

The circuit breakers protect the receptacles and alternator. Overloading generator will trip circuit breaker. A short circuit in item being powered will also trip breaker. If this occurs, unplug electrical load from receptacle. Let circuit breaker cool down. Push circuit breaker button to reset.

Electric motors need higher starting current. They require up to 3-times their rated wattage to start. The starting current needed may be too high. This can cause nuisance circuit breaker tripping. To help prevent this, start electric motors first. Connect additional items to generator after starting motors. If this continues to happen, reduce the total generator load.

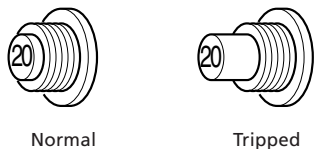


Figure 8 – Receptacle Circuit Breaker Button

### SPARK ARRESTER

We ship a spark arrester with this generator. You must install spark arrester to muffler (See Figure 9).

A spark arrester is required if using generator in a national forest and other designated state and local areas. Check local codes.

The spark arrester needs periodic cleaning. A dirty spark arrester reduces engine output and increases fuel consumption. It also makes starting difficult. See engine owner's manual for cleaning instructions.

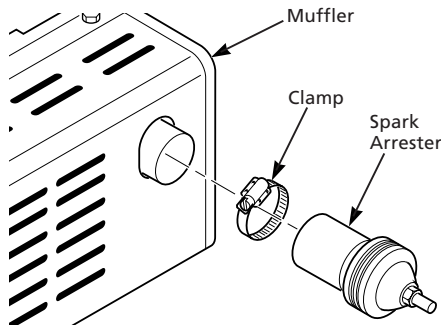


Figure 9 - Installing Spark Arrester

### Assembly BATTERY

**▲WARNING** *Battery gives off explosive gases.*

*Keep sparks, flames, and cigarettes away. Do not remove or install battery cables when engine is cranking or running. Only service or use battery in a well-vented area.*

**▲WARNING** *Battery contains sulfuric acid.*

*Contact with skin or eyes may cause severe burns. Do not tilt generator with battery installed. Tilting could cause battery acid to spill. Wear protective clothing and face shield when servicing. Keep out of children's reach.*

- *If battery acid gets on your skin, wash with water.*
- *If battery acid gets in your eyes, flush with water at least 15 minutes. Call a doctor at once.*

*Battery acid is poisonous.*

- *If swallowed, drink large amounts of water or milk. Follow with milk of magnesia or vegetable oil. Call a doctor at once.*

**▲CAUTION** *If you remove battery, insulate the red, positive (+) battery cable terminal. Insulate with electrical tape. Exposed terminal may spark when generator runs.*

**IMPORTANT:** Make sure battery connections are the correct polarity. Electric start generators use negative ground, 12-volt DC starting system.

A battery is not supplied with generator. You must provide a 12-volt, 45-amp-hour battery. The positive and negative battery cables are supplied with generator. You must install these cables before mounting battery.

Always wear safety glasses when working with battery. Make sure battery terminals are clean. Make sure cable connections are tight.

Always shut down engine before removing or attaching battery cables. Always remove the negative (-) cable first. Always attach negative (-) cable last.

### INSTALLING BATTERY CABLES TO ENGINE

1. Attach the red, positive (+) battery cable to the starter solenoid on engine (See Figure 10).

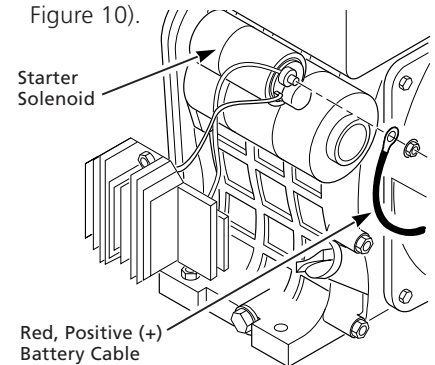


Figure 10 – Connecting Red, Positive (+) Battery Cable to Starter Solenoid on Engine

2. Attach the black, negative (-) battery cable to the engine block. Use the bolt, nut, and two washers provided with the battery cables. Attach cable as shown in Figure 11, page 8.

# Dayton® Diesel Electric Generator

## Assembly (Continued)

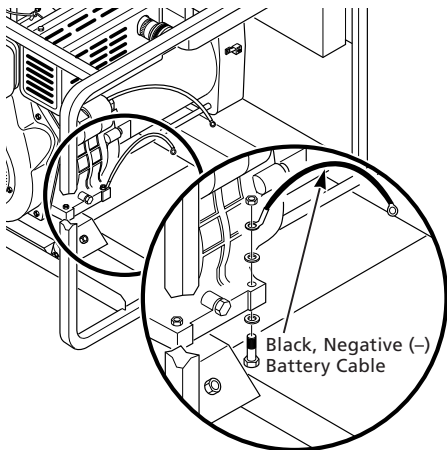


Figure 11 – Connecting Black, Negative (-) Battery Cable to Engine Block

## MOUNTING BATTERY TO GENERATOR

1. Secure battery to generator by battery hold-down system. This system consists of the battery mounting bracket, hook bolt, and nut (See Figure 12).

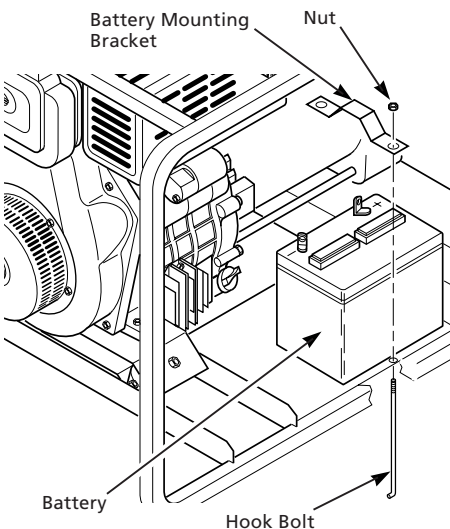


Figure 12 – Battery Hold-Down System

2. Locate the red, positive (+) battery cable from starter solenoid. Connect it to the positive (+) battery terminal (See Figure 13).
3. Locate the black, negative (-) battery cable attached to engine block. Connect it to the negative (-) battery terminal (See Figure 13).
4. Check battery before starting engine. Make sure fluid levels are full. Make sure battery is charged.

See engine owner's manual for more information.

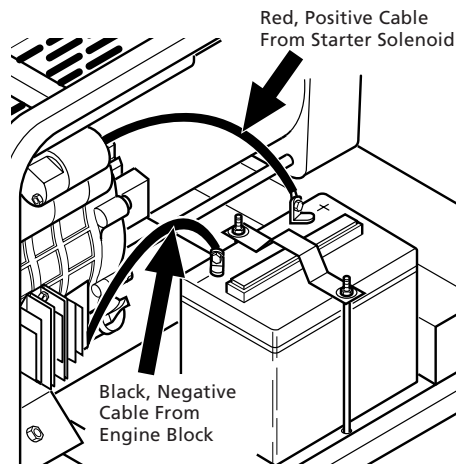


Figure 13 – Connecting Positive and Negative Cables to Battery

## Installation

### FUEL

**▲WARNING** Diesel fuel presents a hazard of fire. Diesel fuel is flammable.

- Keep fuel out of children's reach.
- Refuel generator in a well-vented area. Do not fill fuel tank in the dark. Do not refuel while engine is running. Unhook all electrical loads and shut off engine before refueling.

- Do not overfill fuel tank. Always allow room for fuel to expand. If you overfill tank, fuel can overflow onto hot engine. This can cause fire. After refueling, tightly close fuel tank cap.
- Do not spill fuel. If fuel spills, make sure area is dry before starting engine.
- Never smoke in refueling area. Never allow open flames or sparks in area.
- Store fuel in approved container. Store fuel in a well-vented area free of open flames or sparks.

Use clean, fresh, diesel fuel. Use diesel fuel with cetane rating of 45 or higher. Avoid getting dirt, dust, or water in fuel tank.

See engine owner's manual for more information.

### ENGINE OIL

We ship the generator without oil in the engine crankcase. You must add oil before starting engine. See "Engine Lube Oil," page 9 for specific oil type.

### CHECKING OIL LEVEL AND ADDING OIL

Follow steps below to check oil level. Make sure engine is level and stopped.

1. Remove dipstick (See Figure 14). Wipe dipstick clean.
2. Insert dipstick into oil filler neck. Do not screw it in. Oil level should be at top of filler neck. Oil should cover most of dipstick.
3. If level is low, fill to top of oil filler neck (See Figure 14). Use proper lube oil to preserve your engine.

**NOTE:** If oil level is too low, oil alert system will shutdown engine and prevent engine from restarting.



# Model 4W315C

## Installation (Continued)

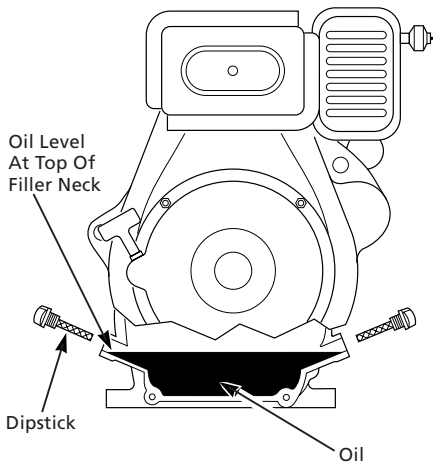


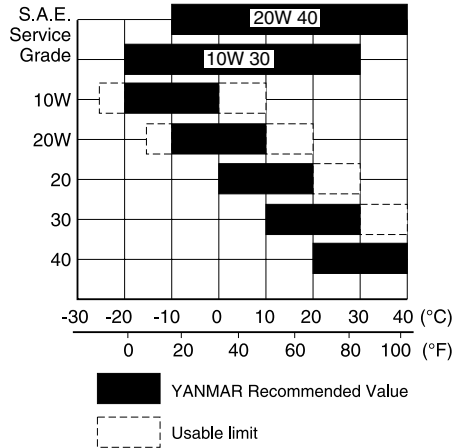
Figure 14 – Checking Oil Level

### ENGINE LUBE OIL

Nothing affects the performance and durability of your engine more than the lube oil you use. Using inferior oil or not changing oil regularly increases the risk of piston seizure, piston ring sticking, and accelerated wear of cylinder liner, bearing and other moving parts. Your engine life may be seriously shortened. Yanmar recommends CC/CD oil of API engine service classification, stock number 4ZF20.

Always use oil with the right viscosity for the ambient temperature in which you are using the engine. Use the chart below when choosing your engine oil.

Lube Oil Capacity:  
4W315C 1.74 qt.



### VENTILATION

**⚠ DANGER** Use only in well-vented areas. Make sure area has plenty of free-moving, fresh, outside air. Never run generator in an enclosed or confined area. Never run generator inside occupied building. Engine exhaust contains poisonous carbon monoxide gas. Overexposure will cause loss of consciousness and will lead to death.

This generator needs cooling air to run properly. Never block free-flowing, cooling air to generator. Overheating will occur without cooling air. This will damage the generator. Keep generator at least three feet away from any object.

### GENERATOR GROUNDING

**⚠ WARNING** You must properly earth-ground generator before starting. This will help guard against deadly electric shock. Only use grounded plugs with generator. Only use grounded extension cords. Only use three-wire or double-insulated power tools.

Grounding generator helps prevent electric shock from a ground fault condition.

Locate ground lug on end of generator housing (See Figure 15). Attach a #10 stranded-copper ground wire to ground lug. Drive grounding point into ground. Grounding point can be a stake, grounding rod, or pipe. Grounding point should be copper or brass. Attach ground wire to grounding point. You must supply the ground wire and grounding point. They do not come with generator. Follow the National Electrical Code and all state and local codes. Consult your power company or a licensed electrician.

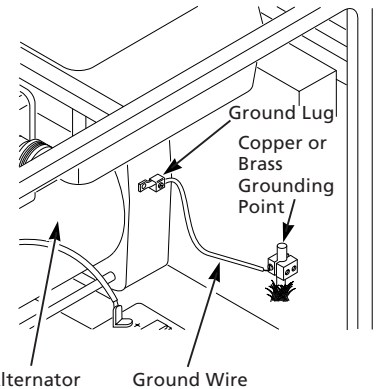


Figure 15 – Grounding Generator

**⚠ WARNING** For a grounding point, do not use metal pipe being used to carry combustible materials or gases.

### DUST, DIRT, RAIN, AND SNOW

**⚠ WARNING** Do not use generator outdoors in rain or snow. Do not use generator near standing water or snow. Do not use if generator is wet or damp. Operating generator in these conditions increases the risk of electrocution. Severe injury or death can occur.

Do not use generator in extremely dusty or dirty conditions. This will severely affect its life. Keep generator clean. Do not allow

# Dayton® Diesel Electric Generator

## Installation (Continued)

dust, dirt, rain, or snow to collect on it. Protect generator from outdoor elements.

### EXTENSION CORDS

Only use grounded extension cords. Be sure to use extension cord with proper wire gauge size. See chart below.

### RECOMMENDED MINIMUM WIRE GAUGES (AWG) FOR EXTENSION CORDS

Ampere Load	AWG for 50' Cord	AWG for 100' Cord	AWG for 150' Cord
2	18	18	18
3	18	18	18
4	16	16	16
5	16	16	16
6	16	16	14
8	16	14	12
10	16	14	12
12	14	14	12
14	14	12	10
16	12	12	10
20	10	10	8

### GROUND FAULT PROTECTION

Ground Fault Circuit Interrupter (GFCI) helps guard against electric shock. On construction sites, you must use a GFCI. OSHA and the National Electric Code requires this.

### STANDBY INSTALLATION TO HOME OR BUILDING

**▲WARNING** *Have standby installation performed by a skilled, licensed electrician. Do not let anyone else wire into a utility circuit. Personal injury, equipment damage, or damage to home could occur.*

**IMPORTANT:** This generator will not power your entire home. Most home utility electric service is more than 60 amps. This will exceed generator output. Only power needed items during a power outage. Make sure total wattage of electrical load does not exceed rated wattage of generator.

You can use this generator as a standby power source. During a power outage, the generator will power selected items in a building. Have generator and additional wiring installed by a skilled, licensed electrician. This is not a do-it-yourself job. Follow all local codes.

**The electrician must install a double-throw transfer switch. This isolates existing electrical circuits from the utility power line. If not isolated,**

#### ▲WARNING

**generator output will back-feed into utility power line. This may electrocute a power company line repair person.**

### DETERMINING ELECTRICAL LOAD FOR GENERATOR

You must decide what electrical load your generator can power. Do this before using generator. Use the following four-step method. It will help you select a load that is not too large. Make sure total wattage of all electrical loads does not exceed 5000 watts. Electric motors present a special problem when figuring load. Read Step 3 carefully.

1. Make two lists of items you want powered by generator. List all motors and motor powered appliances in one. List all lights, small appliances, etc. in the other. For standby service to home or building, only include items you must power.

2. Enter running watts of each item except motors. The light bulb or appliance nameplate lists its wattage. Remember, 1KW = 1000 watts.

**NOTE:** The nameplate may not list wattage. It may only list volts and amps. The formula for finding wattage is: Volts x Amps = Watts. For example: An appliance nameplate states 3 amps at 120 volts. 3 amps x 120 volts = 360 watts.

3. Electric motors present a special problem. They require 3 to 6 times their rated full-load wattage to start. Chart 2, page 11, shows starting watts (maximum volt-amperes [VA]) for different size motors. For example: an electric motor nameplate states 5 amps at 120 volts. 5 amps x 120 volts = 600 watts running. Multiply this figure by 3. This will show the starting watts (maximum VA) needed. 600 watts x 3 = 1800 watts (VA) to start. When figuring the generator load for motors, you must use the starting watts (maximum VA) figure. Do not use the running watts figure.

**NOTE:** Some motors require nearly the same wattage to run as to start. These items include saws, drills, hair dryers, and food mixers. See Chart 1, page 11 for typical appliance wattage examples.

4. Add watts and starting watts (maximum VA) of all items. This total must not be larger than 5000 watts. It is a good idea to have up to 25% extra capacity for future needs or extra equipment.

# Model 4W315C

## Installation (Continued)

### TYPICAL ELECTRIC APPLIANCE WATTAGES

Chart to be used as a reference. Data may vary with size, make, and/or model.

**CHART 1**

Equipment	Running Watts	Starting Watts (Max. VA)
Light bulb (100W)	100	100
Radio	150	150
Fan	200	600
Television	400	400
Furnace fan—1/3 HP with blower	600	1800-2400
Vacuum cleaner	600	750
Sump pump—1/3 HP	700	2100-2800
Refrigerator/freezer	800	2400-5000
6" Circular saw	800	1000
Floodlight	1000	1000
1/2" Drill	1000	1250
Toaster/coffeemaker	1200	1200
Skillet	1200	1200
14" Chain saw	1200	1500
Water well pump—1/2 HP	1000	3000-6000
Hot plate/range (per burner)	1500	1500
10" Table saw	2000	6000
Water heater (storage-type)	5000	5000

**CHART 2**

Motor HP Rating	Approximate Running Watts	Approximate Starting Watts* (Max. VA) Universal Motors (small appliance)	Approximate Starting Watts* (Max. VA) Repulsion Induction Motors	Approximate Starting Watts* (Max. VA) Capacitor Motors	Approximate Starting Watts* (Max. VA) Split Phase Motors
1/8	500	625	1100	1500	2250
1/4	700	875	1550	2100	3150
1/3	800	1000	1750	2400	3600
1/2	1100	1375	2400	3300	4950
3/4	1400	1750	3100	4200	†
1	1700	2125	3750	5100	†
1 1/2	2100	2625	4620	6300	†
2	2450	3075	5400	7350	†
3	3600	†	7800	10800	†

(\*) Always use starting watts (maximum VA), not running watts, when figuring correct electrical load.

(†) Motors of higher horsepower are not generally used.

**NOTE:** Please check with appliance manufacturer for maximum wattage required.

# Dayton® Diesel Electric Generator

## Operation

### HIGH AND LOW TEMPERATURE OPERATION

Air temperature affects generator output. Output drops 1% for each 10° temperature rise above 60° F. Very low temperatures may make the engine hard to start. See engine owner's manual for more information.

### GENERAL INFORMATION

This generator is not large enough to power your entire home. Do not connect generator to any existing electrical circuits. Plug items directly into generator receptacles. Do not exceed amperage rating of receptacles. Only use grounded cords.

**⚠ DANGER** *Use only in well-vented areas. Make sure area has plenty of free-moving, fresh, outside air. Never run generator in an enclosed or confined area. Never run generator inside occupied building. engine exhaust contains poisonous carbon monoxide gas. Overexposure will cause loss of consciousness and will lead to death.*

**⚠ WARNING** *Never connect generator to any existing electrical circuits. The generator output will back-feed into the utility power line. This may electrocute a power company line repair person. Also, if generator is powering electrical circuits, the chance of an electrical fire exists.*

**NOTE:** We supply the engine owner's manual with generator. Refer to that manual for questions concerning engine operation.

### USING RECEPTACLE

**NOTE:** Do not exceed amperage rating of receptacles. Exceeding rating will trip receptacle circuit breaker.

Use receptacles properly. Improper use could damage generator. Use only grounded extension cords. Power only grounded or double-insulated items. Do not overload receptacles. These generators have the following receptacles (See Figure 16):

- 120V, 15-amp duplex receptacle
- 120V, 15-amp GFCI duplex receptacle
- 120V, 30-amp twist-lock receptacle
- 120/240V, 20-amp twist-lock receptacle

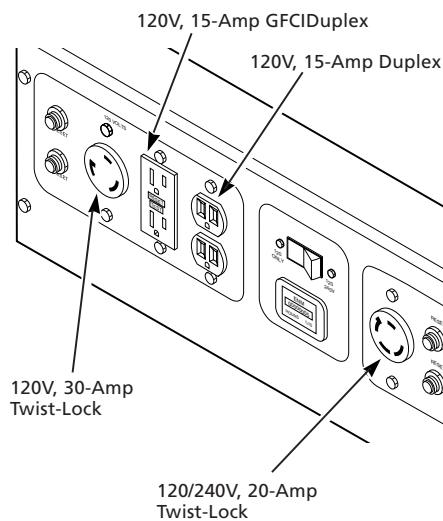


Figure 16 – Receptacle Locations

### POWER CORD AND PLUG REQUIREMENTS

- 120V, 30-amp twist-lock receptacle
- NEMA L5-30P plug
  - Three-wire, 30-amp cord
- 120/240V, 20-amp twist-lock receptacle
- NEMA L14-20P (20-amp) plug
  - Four-wire, 20-amp cord

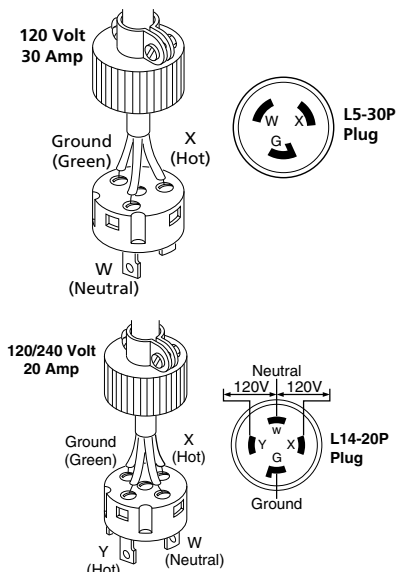


Figure 17 – Cord and Plug Configurations

### PRESTART

Operate generator on a firm, dry, and clean surface. The surface must be level. Protect generator from heavy dust, sand, dirt, rain, or snow. Do not locate generator near standing water or snow. Make sure area is well-vented.

**⚠ WARNING** *Only responsible adults should use generator. Never let anyone operate generator without proper instructions.*

**NOTE:** If oil level is too low, oil alert system will keep engine from starting (See "Oil Alert System," page 5). Make sure oil level is full before starting. See *Engine Oil*, page 8.

Before starting the engine, disconnect all electric loads from generator.

You may need to bleed fuel line to remove trapped air

- if starting engine for first time
- if starting engine after allowing generator to run out of fuel

# Model 4W315C

## Operation (Continued)

### BLEEDING FUEL LINE

1. Loosen fuel line clamp and remove fuel line from engine. Place open end of fuel line over a clean container to catch any fuel spilled in step 3, below.
2. Move fuel valve lever to the "O" (open) position (See Figure 18).
3. Allow air to bleed from line. When fuel exits fuel line in a steady stream, reattach fuel line to engine.
4. Add spilled fuel back into fuel tank.

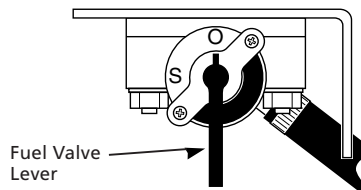
### STARTING

**⚠ WARNING** *Never use gasoline, paint thinner, or any other flammable liquid as a starting aid. An explosion may occur.*

**IMPORTANT:** The engine speed is preset. The throttle is locked in preset position. Do not adjust throttle. Preset position lets engine run at 3600 RPM under load. The engine must maintain 3600 RPM for generator to create correct voltage. Running engine at lower speeds will damage generator and powered items.

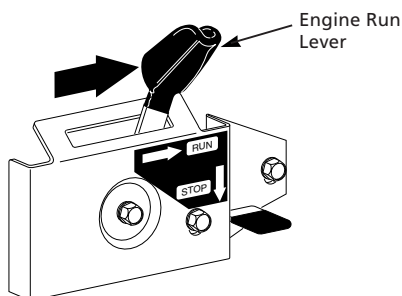
**IMPORTANT:** Never start generator with electrical loads connected. Start engine before adding electrical loads.

1. Make sure fuel tank is full. See "Fuel," page 8 for fuel information.
2. Move fuel valve lever to the "O" (open) position (See Figure 18).



**Figure 18 - Fuel Valve Lever in "O" (open) Position**

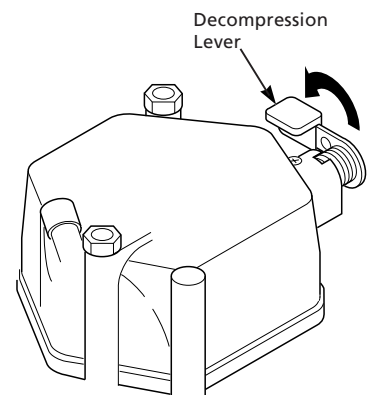
3. Move engine run lever to the RUN position (See Figure 19).



**Figure 19 - Engine Run Lever**

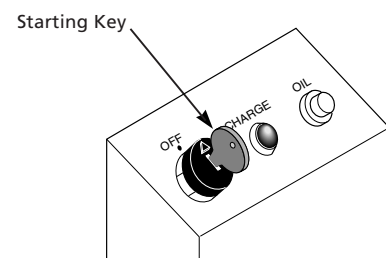
**⚠ CAUTION** *You must fully move engine run/stop knob to the RUN position to run engine at 3600 RPM. Do not run engine at lower speeds. Running engine at lower speeds will damage generator and powered items.*

4. Start the engine.
  - a. Electric Starter
    - (1) Slowly pull starter rope until you feel strong resistance. Gently return starter rope to engine.
    - (2) Push decompression lever all the way down (See Figure 20). Decompression lever will stay in this position until you turn starting key.



**Figure 20 - Decompression Lever**

- (3) Turn the starting key clockwise to the START position (See Figure 21). Hold it there until engine starts.



**Figure 21 - Starting Key**

- (4) When engine starts, release key.

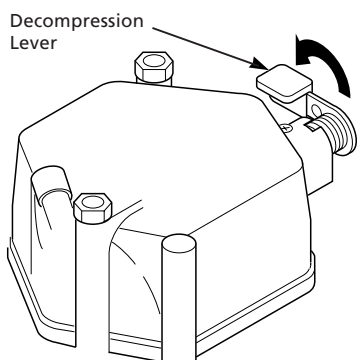
**IMPORTANT:** Do not use electric starter more than ten seconds. Starter motor damage may occur. If engine fails to start, release the key and wait 15 seconds. After 15 seconds, try starting again.

# Dayton® Diesel Electric Generator

## Operation (continued)

### b. Recoil Starter

- (1) Slowly pull starter rope until you feel strong resistance. Gently return starter rope to engine.
- (2) Push decompression lever all the way down (See Figure 22). Decompression lever will stay in this position until you pull starter rope.



**Figure 22- Decompression Lever**

- (3) Firmly grasp starter grip with both hands. Remove slack from starter rope by lightly pulling starter grip.
- (4) To start engine, pull starter rope briskly. You must pull the starter rope all the way out. If not, the engine will not start.

**IMPORTANT:** Do not let starter grip snap back against engine. Return it gently. This will prevent damage to starter.

**⚠ WARNING** *Never use gasoline, paint thinner, or any other flammable liquid as a starting aid. An explosion may occur.*

If engine does not start, repeat steps under b. Recoil Starter on this page.

## HIGH ALTITUDE OPERATION

This generator will not perform well at high altitudes without proper adjustment. Contact a Yanmar dealer for adjustment information.

## ADDING ELECTRICAL LOADS

**IMPORTANT:** Do not overload generator. Make sure total wattage of all electrical loads does not exceed rated wattage of generator. Overloading may shorten generator life. It could also cause internal damage to generator. Overloading will trip circuit breaker.

**IMPORTANT:** Keep full power selector switch in the 120 VOLT ONLY position if only powering 120V items. Only move switch to 120/240 VOLT position if powering 240V items.

1. Check items to be powered. Their nameplate lists their wattage ratings.

**NOTE:** The wattage ratings for some electrical motors are misleading. They may require 3 to 6 times their rated full-load wattage to start. You must figure total electrical load wattage. Make sure total wattage of all electrical loads does not exceed rated wattage of generator. See "Determining Electrical Load For Generator," page 10.

2. Start engine. Let engine reach full speed.
3. Connect electrical loads one at a time. If the load consists of electric motors, start them first. Always start the largest first. Start each motor individually.

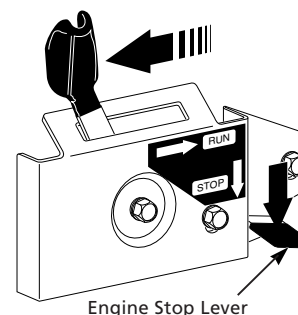
## DISCONNECTING ELECTRIC LOADS

Remove electrical loads one at a time. Remove voltage sensitive items first. Voltage sensitive items include TVs, VCRs, and other home electronic items.

## STOPPING ENGINE

Follow the steps below to stop engine.

1. Remove all electrical loads from generator (See "Disconnecting Electrical Loads," above). Remove electrical loads one at a time.
2. Let engine run for two or three minutes after removing electrical loads. This lets engine cool slightly.
3. Push down engine stop lever (See Figure 23). This releases engine run lever and stops engine. Do not stop engine with the decompression lever.
4. Turn the starter key to the OFF position.



**Figure 23 - Pushing Down Engine Stop Lever**

5. Turn fuel valve lever off. Do this by moving valve lever to the "S" position (See Figure 24, page 15).
6. Slowly pull starter rope until you feel strong resistance. Gently return starter rope to engine. This action closes the intake and exhaust valves. This prevents rust from forming while not using engine.



# Model 4W315C

## Operation (continued)

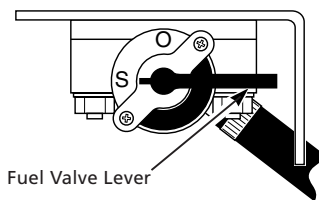


Figure 24 - Fuel Valve Lever In "S" Position

## Maintenance and Repairs

**▲ WARNING** *Only a qualified electrical service person should service and repair the alternator on this generator. Use only factory approved replacement parts.*

**▲ CAUTION** *You must always run the engine at full speed. Do not run engine at lower speeds. At full speed, the engine runs at 3600 RPM under load. The engine must maintain 3600 RPM for generator to create correct voltage. Running engine at lower speeds will damage generator and powered items.*

**▲ CAUTION** *Shut off generator before performing maintenance.*

**IMPORTANT:** Keep generator level when servicing. Never turn generator upside down or stand it on end to service.

**NOTE:** We supply the engine owner's manual with generator. Refer to that manual for questions concerning engine maintenance and repairs.

Non-engine parts require little maintenance. Keep generator clean. Use a damp cloth to clean outside surfaces. Never use water to clean generator. Water can cause damage to internal parts. Use vacuum to clean air inlet and outlet louvers of alternator.

### SERVICING THE ENGINE

For Yanmar engine replacement parts, contact Grainger Parts at 1-800-323-0620.

Yanmar engine servicing should be handled by your nearest authorized Yanmar engine service firm. Contact Yanmar at 1-847-541-1900 for nearest authorized Yanmar engine service firm.

### ENGINE MAINTENANCE

Periodic checks and maintenance are very important for keeping the engine in good condition and durable. The chart on page 18 indicates which checks to make and when to make them. The mark "•" indicates that special tools and skills are required. Items marked "•" should be serviced by an authorized Yanmar dealer, unless the owner has the proper tools and is mechanically proficient.

Consult your Yanmar dealer.

**▲ WARNING** *Shut off the engine before performing any maintenance. If the engine must be run, make sure the area is well ventilated. The exhaust contains poisonous carbon monoxide gas.*

**▲ CAUTION** *After the engine has been used, clean the engine immediately with a cloth to prevent corrosion and to remove sediment.*

**▲ CAUTION** *Only use genuine Yanmar parts. The use of replacement parts which are not of equivalent quality may damage the engine.*

### HOW TO CHANGE YOUR ENGINE OIL

Remove the oil filler cap. Remove the drain plug and drain the old oil while the engine is still warm. The plug is located on the bottom of the cylinder block. Tighten the drain plug and refill with the recommended oil. (See the section under "Preparations for Starting" in the engine owner's manual.)

### CLEANING THE OIL FILTER

Loosen the fixing bolt and then pull out the oil filter. Clean oil filter every six months or 500 hours of operation.

### CHANGING THE AIR CLEANER ELEMENT

Do not wash the air cleaner element with detergent because this is a wet-type element. Change air cleaner element every six months or 500 hours of operation (or earlier if dirty).

See the section for changing the air cleaner element under "Preparations for Starting" in the engine owner's manual.

**▲ CAUTION** *Never run the engine without the air cleaner element or with a defective element.*

**NOTE:** A clogged element hinders the flow of air to the combustion chamber. This reduces engine output, increases lube oil and fuel oil consumption and makes starting difficult. Make sure you clean your

# Dayton® Diesel Electric Generator

## Maintenance and Repairs (Continued)

element regularly.

### CLEANING AND REPLACING THE FUEL FILTER

The fuel filter also has to be cleaned regularly to insure maximum engine output. Clean fuel filter every six months or 500 hours of operation. Replace fuel filter every year or 1000 hours of operation.

1. Drain the fuel oil from the fuel tank.
2. Loosen the nuts of the fuel cock and pull out the filter from the fuel tank filler port. Wash the filter thoroughly with diesel fuel.

### CLEANING THE SPARK ARRESTER

**▲WARNING** *If the engine has been running, the muffler and the spark arrester will be very hot. Allow these to cool before proceeding.*

Remove the lock nut, end cap and diffuser discs and clean off the carbon deposits. Clean spark arrester every three months or 100 hours of operation (or earlier if dirty).

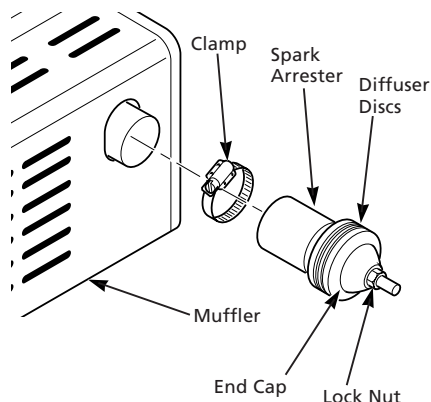


Figure 25 - Spark Arrester

**▲CAUTION** *A clogged spark arrester hinders the flow of exhaust gas. This reduces engine output, increases fuel consumption and makes starting difficult. Make sure you clean your spark arrester regularly.*

### TIGHTEN CYLINDER HEAD BOLTS

Tightening the cylinder head bolts requires a special tool. Don't try it yourself. Consult your Yanmar dealer.

### CHECKING THE INJECTION NOZZLE, INJECTION PUMP, ETC.

- Adjusting the valve head clearance for the intake and exhaust valves.
- Lapping of intake and exhaust valves.
- Replacing piston ring.

All these require special tools and skills. Consult your Yanmar dealer.

**▲WARNING** *Do not perform the injection nozzle test near an open fire or any other kind of fire. The fuel spray may ignite. Do not expose bare skin to the fuel spray. The fuel may penetrate the skin and cause injury to the body. Always keep your body away from the nozzle.*

### CHECKING AND REPLENISHING BATTERY FLUID AND CHARGING THE BATTERY

Battery fluid will be lost through continuous charging and discharging.

**▲WARNING** *The battery electrolyte contains sulfuric acid. Protect your eyes, skin, and clothing. In case of contact, flush thoroughly with water and get prompt medical attention, especially if your eyes are affected.*

**▲WARNING** *Batteries generate hydrogen gas, which can be highly explosive. Do not smoke or allow flames or sparks near the battery, especially during charging.*

**NOTE:** Much more fluid is lost during summer than in winter.

Before starting, check for physical damage to the battery and also the electrolyte levels, and replenish with distilled water up to the upper mark if necessary. When actual damage is discovered, replace the battery. Check battery fluid monthly.

**▲WARNING** *Before charging, remove the cap from each cell of the battery. Charge the battery in a place where there is plenty of ventilation. Discontinue charging if the electrolyte temperature exceeds 45°C (117°F).*

**▲CAUTION** *Do not charge the battery with the battery cable still connected. The diodes will be damaged by the high voltage.*

**▲CAUTION** *Connect the (+) lead of the charger to the (+) terminal of the battery, and the (-) lead to the (-) terminal. Reversed polarity will damage the charger rectifier or the battery.*

### Storage

**▲WARNING** *Remove all fuel from fuel tank before storing generator. Store fuel in approved container. Store fuel in a well-vented area free of open flames or sparks.*

**▲WARNING** *The muffler becomes very hot during operation. The muffler remains hot for a while after shutdown. Let engine cool before storing.*

**IMPORTANT:** Keep generator level while in storage. Never store generator upside down or standing on end.

Cover and store generator in a clean, dry place. Do not expose generator to extreme high or low temperatures during storage.

# Model 4W315C

## Storage (Continued)

### ENGINE STORAGE

If storing your engine for long periods, make the following preparations.

1. Operate the engine for about 3 minutes and then stop.
2. Stop the engine. Drain the engine lube oil while the engine is still warm and fill with new oil.
3. Pull the recoil starter slowly. Stop when it feels tight. This closes the intake and exhaust valves (in compression position) and helps prevent rust from forming.
4. Wipe the oil and dirt from the engine and store in a dry place.

### CHART 3

Item	Daily Check	Service Monthly	Service First Month or 20 Hrs.	Service Every 3 Months or 100 Hrs.	Service Every 6 Months or 500 Hrs.	Service Every Year or 1000 Hrs.
Check and replenish fuel oil	○					
Drain fuel from fuel tank		○				
Check and replenish lube oil	○					
Check for oil leakage	○					
Check and tighten engine parts	○					
Check and tighten engine head bolts					●	
Change lube oil (first time)			○			
Change lube oil (each time after first)				○		
Clean oil filter (replace if needed)					○	
Replace air cleaner element (Service more frequently when used in dusty areas)					○	
Clean fuel filter					○	
Replace fuel filter						●
Clean spark arrester				○		
Check fuel injection pump					●	
Check fuel injection nozzle					●	
Check fuel piping (replace if needed)					●	
Adjust valve head clearance for intake and exhaust valves (first time at 20 hrs)			●			
Adjust valve head clearance for intake and exhaust valves (each time after first)					●	
Lap intake and exhaust valves						●
Replace piston rings						●
Check battery fluid		○				

- Special tools and skills required.
- No special tools or skills required.

# Dayton® Diesel Electric Generator

## Wiring Diagrams

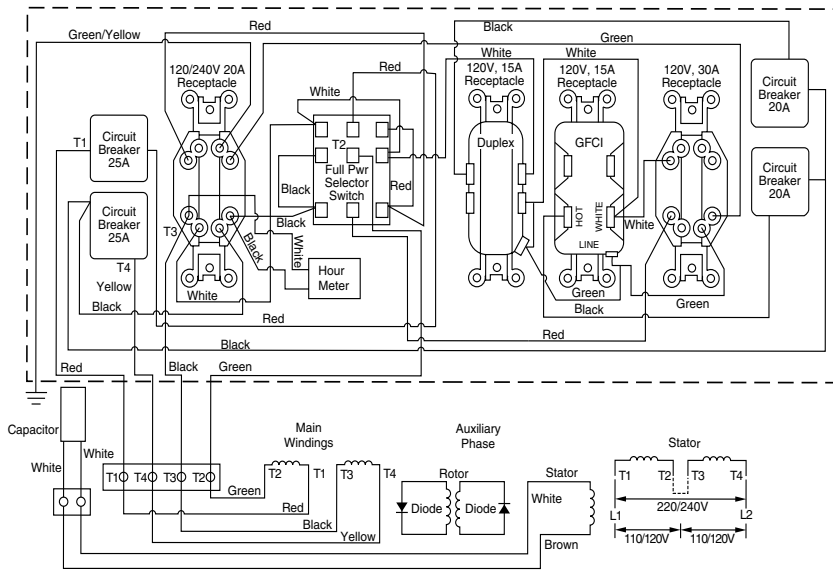


Figure 26 - Alternator Wiring Diagram

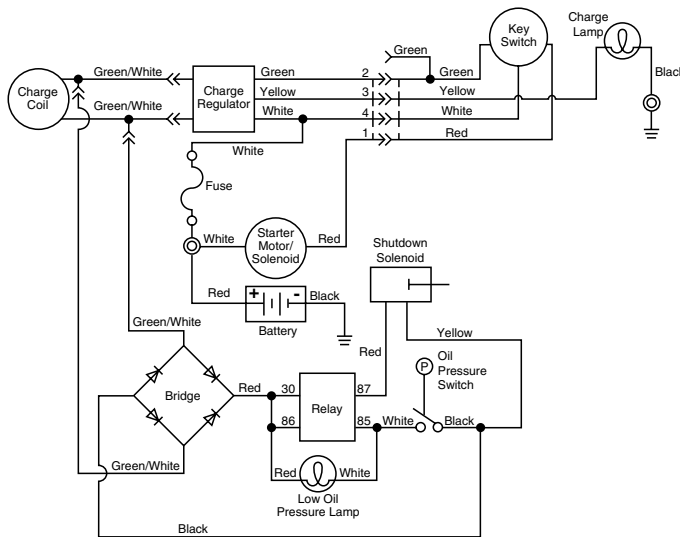


Figure 27 - Engine Wiring Diagram

# Model 4W315C

## Troubleshooting Chart

**NOTE:** See engine owner's manual for engine troubleshooting.

**⚠ WARNING** *Only a qualified electrical service person should service and repair generator. Use only factory approved replacement parts.*

Symptom	Possible Cause(s)	Corrective Action
No voltage when starting generator with no electrical load	<ol style="list-style-type: none"> <li>1. Defective capacitor</li> <li>2. Winding short circuit or loose connections</li> <li>3. Defective rotor diode</li> <li>4. Loss of residual magnetism</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace capacitor</li> <li>2. Check resistance of coils (See "Electrical Component Specifications," page 2)</li> <li>3. Replace both diodes on rotor</li> <li>4. Apply 12-volt battery to capacitor terminals for 2-3 seconds</li> </ol>
Voltage is less than normal voltage with no electrical load	<ol style="list-style-type: none"> <li>1. Engine speed too low</li> <li>2. Clogged spark arrester</li> <li>3. Defective rotor diode</li> <li>4. Partial short circuit in winding</li> <li>5. Defective capacitor</li> </ol>	<ol style="list-style-type: none"> <li>1. Set engine speed to 3720 RPM (62 Hz) with no load</li> <li>2. Clean arrester. See engine owner's manual</li> <li>3. Replace both diodes on rotor</li> <li>4. Check resistance of coils (See "Electrical Component Specifications," page 2)</li> <li>5. Replace capacitor</li> </ol>
Voltmeter reading more than 10% high with no electrical load	Engine speed too high	Set engine speed to 3720 RPM (62 Hz) with no load
Voltmeter reading correct with no electrical load, but more than 10% low when electrical load is added	<ol style="list-style-type: none"> <li>1. Defective rotor diode</li> <li>2. Electrical load too high</li> <li>3. Engine not running properly</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace both diodes on rotor</li> <li>2. Do not overload generator</li> <li>3. Contact an authorized engine service center</li> </ol>
Engine will not start	<ol style="list-style-type: none"> <li>1. Fuel level too low</li> <li>2. Fuel cock not in "O" (open) position</li> <li>3. Diesel fuel not reaching the fuel injection pump or nozzle</li> <li>4. Speed control lever not in START position</li> <li>5. Lube oil level not correct</li> <li>6. Fuel injection nozzle not working right</li> <li>7. Recoil starter not pulled quickly and firmly enough</li> <li>8. Spark arrester clogged by carbon</li> <li>9. Battery not discharging</li> </ol>	<ol style="list-style-type: none"> <li>1. Add fuel to fuel tank</li> <li>2. Move fuel cock to "O" (open) position</li> <li>3. See qualified Yanmar service person</li> <li>4. Move speed control lever to START position</li> <li>5. Add lube oil to engine</li> <li>6. See qualified Yanmar service person</li> <li>7. When starting engine with recoil starter, pull starter rope quickly and firmly. You must pull starter rope all the way out</li> <li>8. Clean spark arrester. See "Cleaning the Spark Arrester," page 16</li> <li>9. Loose battery connections, corrosion on battery terminals, or battery dead</li> </ol>

**For Repair Parts, call 1-800-323-0620**

**24 hours a day - 365 days a year**

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to:

Grainger Parts  
 P.O. Box 3074  
 1657 Shermer Road  
 Northbrook, IL 60065-3074 U.S.A.

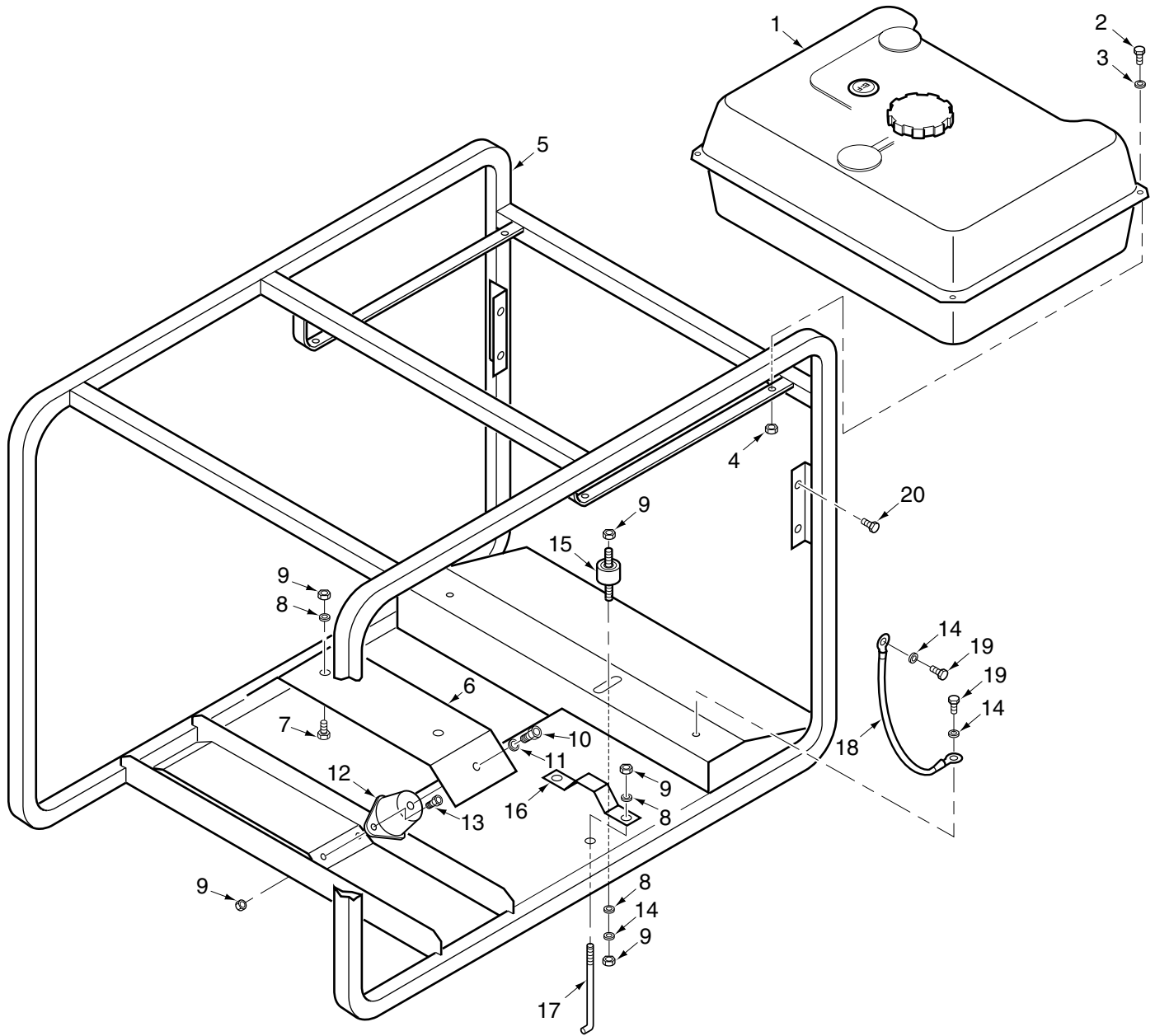


Figure 28 – Repair Parts Illustration for Fuel Tank and Roll Cage



## Repair Parts List for Fuel Tank and Roll Cage

Reference Number	Description	Part No. for Model 4W315C:	Quantity
1	Fuel tank assembly	099935-01	1
2	1/4-20 x 3/4" Screw	*	4
3	1/4" Washer	WP-4C	4
4	1/4-20 Nut	103880-01	4
5	Roll cage	099943-01	1
6	Spreader	099945-01	1
7	5/16-18 x 1 1/2" Bolt	*	2
8	5/16" Washer	WP-5C	5
9	5/16-18 Nut	NEC-5C	9
10	1/2-20 x 1" Screw	26302006	2
11	1/2" Lockwasher	WLI-8	2
12	Shock mounts	17529000	2
13	5/16-18 x 3/4" Bolt	26007004	4
14	5/16" Washer	WLE-5	3
15	Shock mount	099853-02	1
16	Battery bracket	099749-01	1
17	Hook bolt	099750-01	2
18	Ground strap	14138000	1
19	1/4-20 x 1/2" Screw	*	2
20	#8-18 x 1/2" Sems screw	100410-01	4
Δ	Safety information decal	099947-01	1
Δ	Operation decal	099948-01	1
Δ	Battery cable (positive)	099873-01	1
Δ	Battery cable (negative)	099873-02	1

(Δ) Not shown.

(\*) Standard hardware. Available from local hardware store.

# For Repair Parts, call 1-800-323-0620

24 hours a day - 365 days a year

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to:

Grainger Parts  
P.O. Box 3074  
1657 Shermer Road  
Northbrook, IL 60065-3074 U.S.A.

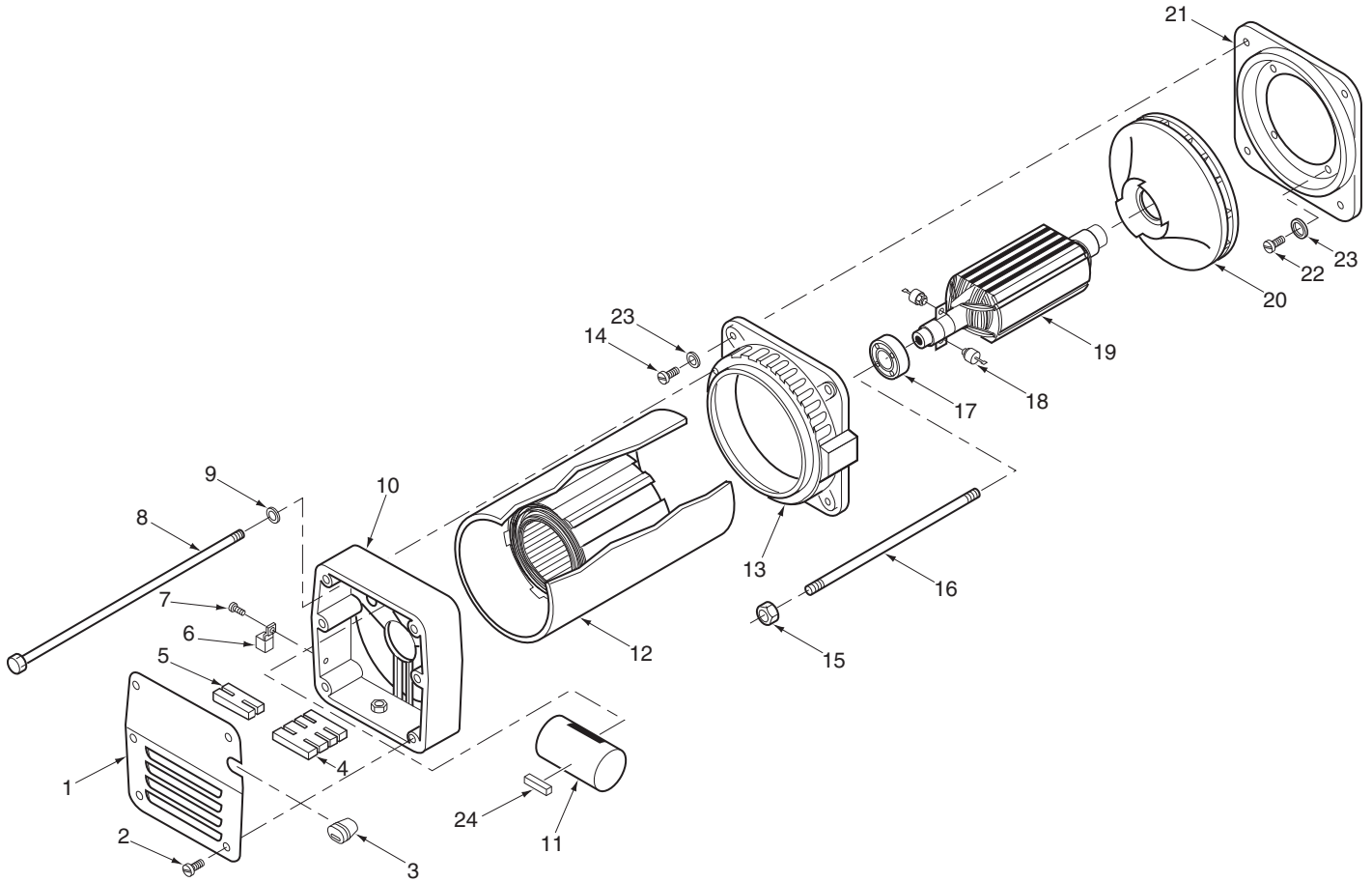


Figure 29 – Repair Parts Illustration for Alternator Assembly

## Repair Parts List for Alternator Assembly

Reference Number	Description	Part No. for Model 4W315C:	Quantity
1	End cover	099844-01	1
2	M5 x 13 Screw	099701-01	6
3	Bushing	099760-01	1
4	Terminal block (4-block)	099863-01	1
5	Terminal block (2-block)	099863-02	1
6	Ground lug	†	1
7	#10-16 x 3/8" Screw	M11084-26	1
8	Stator bolt	099847-02	4
9	5/16" Lockwasher	WLE-5	4
10	Bearing housing	099843-01	1
11	Capacitor	27005003S	1
12	Stator	†	1
13	Fan bracket	27003002	1
14	M8 x 20 Screw	*	4
15	Rotor nut	099891-01	1
16	Draw bolt	099842-02	1
17	Bearing	27003003	1
18	Diode	27003012S	2
19	Rotor	†	1
20	Fan	27003008	1
21	Engine flange	101839-01	1
22	3/8-16 x 5/8" Bolt	*	4
23	3/8" Lockwasher	*	8
24	Foam pad	099892-01	1
Δ	Alternator assembly complete	099723-02	1

(†) Parts not available. Included in Alternator Assembly.

(Δ) Includes reference numbers 1 through 24.

(\*) Standard hardware. Available from local hardware store.

# For Repair Parts, call 1-800-323-0620

24 hours a day - 365 days a year

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to:

Grainger Parts  
 P.O. Box 3074  
 1657 Shermer Road  
 Northbrook, IL 60065-3074 U.S.A.

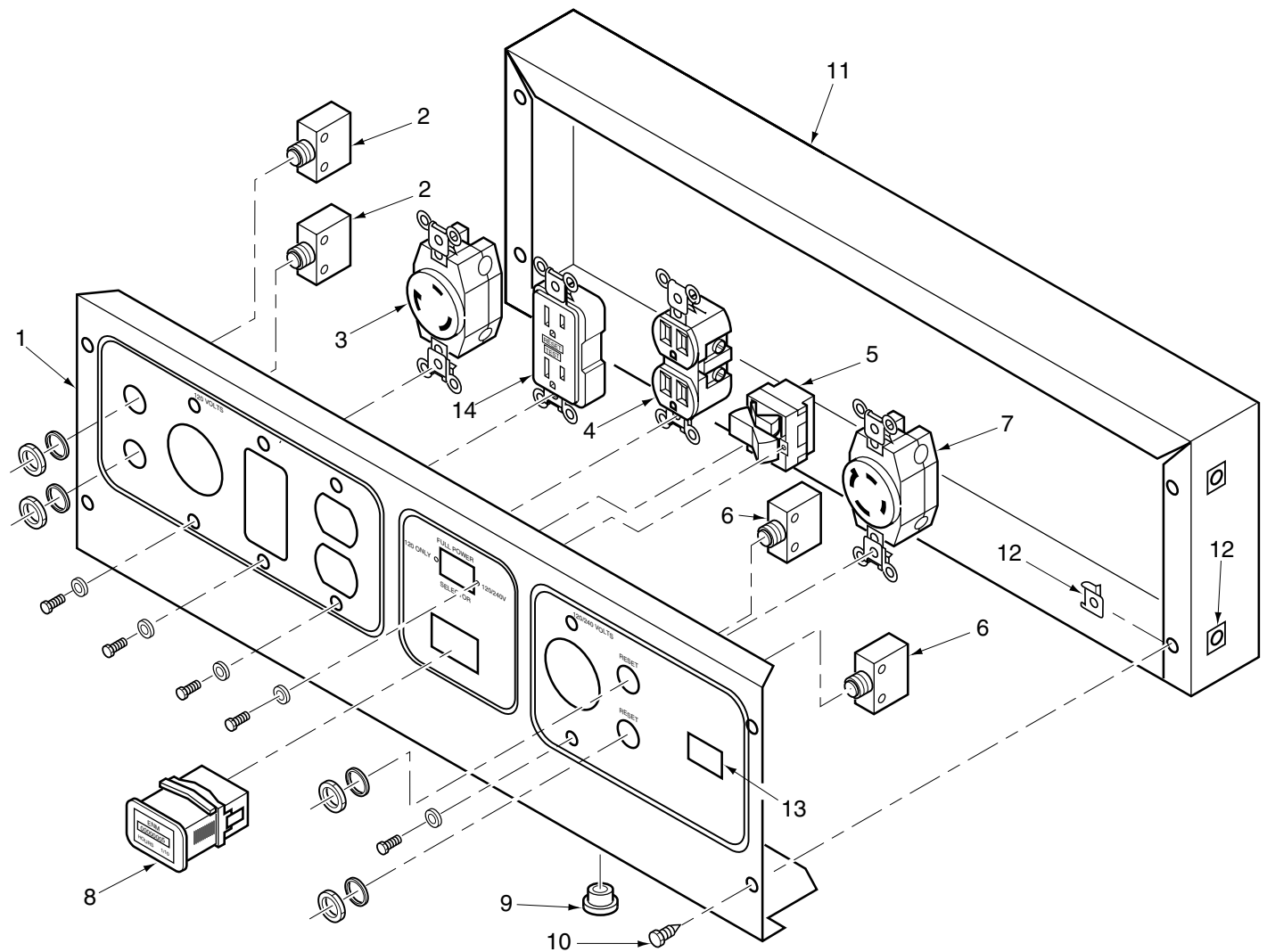


Figure 30 – Repair Parts Illustration for Control Panel

## Repair Parts List for Control Panel

Reference Number	Description	Part No. for Model 4W315C:	Quantity
1	Control panel, front	103349-02	1
2	20 Amp Circuit breaker	*22616009	2
3	120V, 30A Twist-lock receptacle	*099833-01	1
4	120V, 15A Duplex receptacle	*15342000	1
5	Full power selector switch	*099956-01	1
6	25 Amp Circuit breaker	*22616011	2
7	120/240V, 20A Twist-lock receptacle	*099834-01	1
8	Hour Meter	101350-01	1
9	Bushing	099760-01	1
10	#8-18 x 1/2" Sems screw	100410-01	4
11	Control box, rear	100149-01	1
12	U-nut	22261000	8
13	Switch plug	099997-01	1
14	120V, 15A GFCI Duplex receptacle	100445-01	1
Δ	Panel schematic decal	100177-07	1
†	Control panel assembly	103348-02	1

(Δ) Not shown.

(†) Includes reference numbers 1 through 14.

(\*) Includes fastening hardware.

# For Repair Parts, call 1-800-323-0620

24 hours a day - 365 days a year

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to:

Grainger Parts  
P.O. Box 3074  
1657 Shermer Road  
Northbrook, IL 60065-3074 U.S.A.

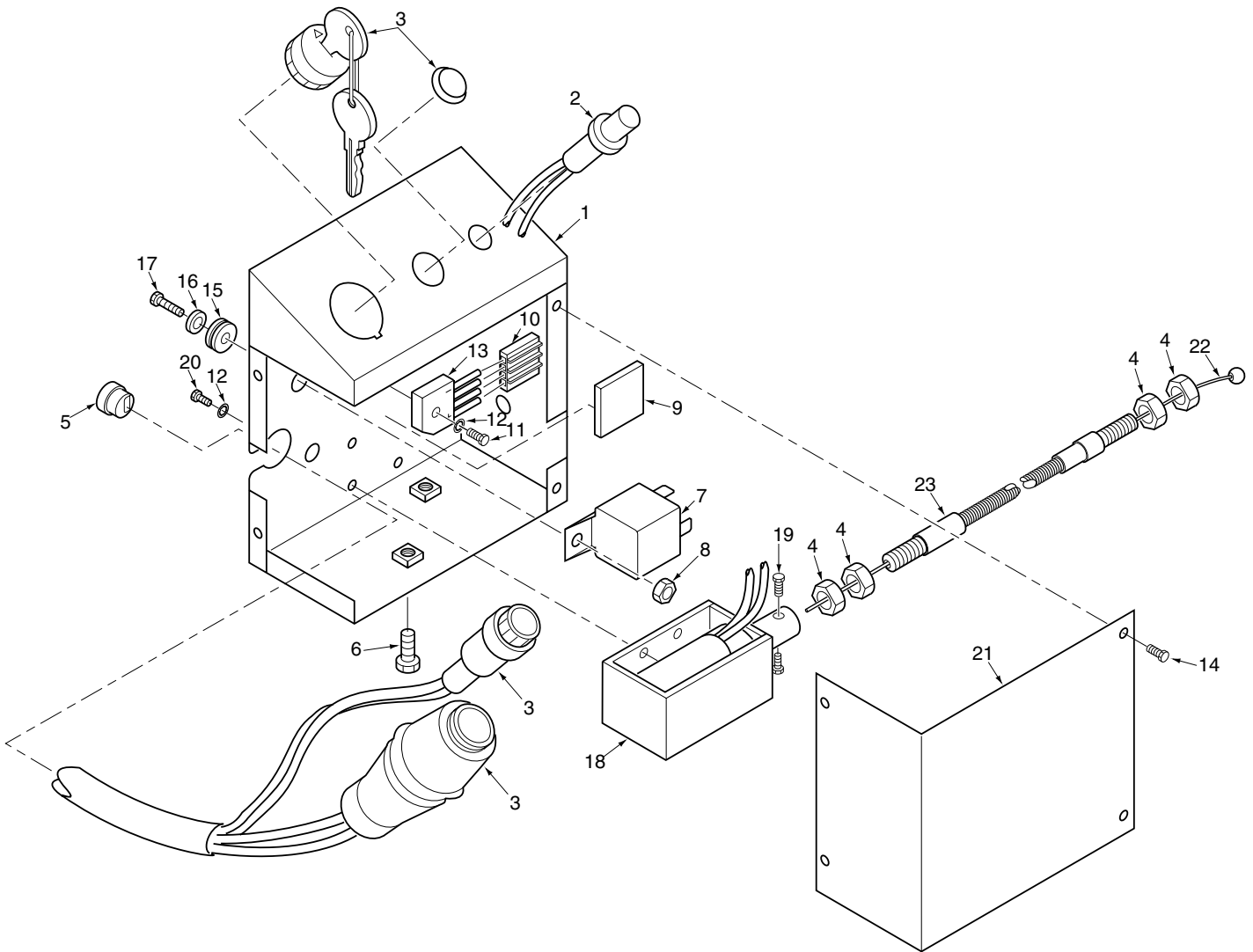


Figure 31 – Repair Parts Illustration for Switch Control Box



## Repair Parts List for Switch Control Box

Reference Number	Description	Part No. for Model 4W315C:	Quantity
1	Switch control box	101037-01	1
2	Low oil light	22721000	1
3	Key switch, lamp, and harness assembly	099936-01	1
4	1/4-28 Keps nut	101039-01	4
5	Strain relief bushing	099760-01	1
6	1/4-20 x 5/8" Hex-head sems	101040-01	2
7	Relay	26498000	1
8	#10-32 Hex locknut	NTF-3C	1
9	Adhesive-backed PVC foam	RN12000100	1
10	Connector	*	1
11	#6-32 x 1/2" Hex tapping screw	*	1
12	#6 Internal-tooth lockwasher	*	5
13	Full bridge	26509000	1
14	#8-32 x 3/8" Screw	*	4
15	Grommet	*	1
16	#10 Flat washer	WP-3C	1
17	#10-32 x 3/4" Hex-head screw	26499000	1
18	Solenoid	26490000	1
19	M4 x 8 Hex-head screw	*	2
20	M3 x 8 Hex-head screw	*	4
21	Control box cover	101038-01	1
22	Cable	101036-01	1
23	Conduit	101035-01	1
†	Switch control box assembly	101103-01	1

(†) Includes reference numbers 1 through 23.

(\*) Standard hardware. Available from local hardware store.

# Dayton® Diesel Electric Generator

**NOTE:** The five-year limited warranty below covers all non-engine parts of this generator including the alternator. Yanmar warrants the engine. See engine owner's manual for engine warranty information.

## Limited Warranty

**DAYTON FIVE-YEAR LIMITED WARRANTY.** Professional-duty electric generator alternator, Model 4W315C, are warranted by Dayton Electric Mfg. Co. (Dayton) to the original user against defects in workmanship or materials under normal use for five years after date of purchase. Any part which is determined to be defective in material or workmanship and returned to an authorized service location, as Dayton designates, shipping costs prepaid, will be, as the exclusive remedy, repaired or replaced at Dayton's option. For limited warranty claim procedures, see PROMPT DISPOSITION below. This limited warranty gives purchasers specific legal rights which vary from jurisdiction to jurisdiction.

**LIMITATION OF LIABILITY.** To the extent allowable under applicable law, Dayton's liability for consequential and incidental damages is expressly disclaimed. Dayton's liability in all events is limited to and shall not exceed the purchase price paid.

**WARRANTY DISCLAIMER.** Dayton has made a diligent effort to provide product information and illustrate the products in this literature accurately; however, such information and illustrations are for the sole purpose of identification, and do not express or imply a warranty that the products are MERCHANTABLE, or FIT FOR A PARTICULAR PURPOSE, or that the products will necessarily conform to the illustrations or descriptions.

Except as provided below, no warranty or affirmation of fact, expressed or implied, other than as stated in the "LIMITED WARRANTY" above is made or authorized by Dayton.

**PRODUCT SUITABILITY.** Many jurisdictions have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While Dayton attempts to assure that its products comply with such codes, it cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, review the product applications, and all applicable national and local codes and regulations, and be sure that the product, installation, and use will comply with them.

Certain aspects of disclaimers are not applicable to consumer products; e.g., (a) some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you; (b) also, some jurisdictions do not allow a limitation on how long an implied warranty lasts, consequently the above limitation may not apply to you; and (c) by law, during the period of this limited warranty, any implied warranties of implied merchantability or fitness for a particular purpose applicable to consumer products purchased by consumers, may not be excluded or otherwise disclaimed.

**PROMPT DISPOSITION.** Dayton will make a good faith effort for prompt correction or other adjustment with respect to any product which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom the product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to Dayton at address below, giving dealer's name, address, date, and number of dealer's invoice, and describing the nature of the defect. Title and risk of loss pass to buyer on delivery to common carrier. If product was damaged in transit to you, file claim with carrier.

**Manufactured for Dayton Electric Mfg. Co., 5959 W. Howard St., Niles, Illinois 60714 U.S.A.**