

# Owner's Manual 2000 W Generator



Warning To Reduce The Risk Of Injury, User Must Read And Understand Instruction Manual.

> HAVE QUESTIONS OR NEED SERVICE DO NOT RETURN TO STORE! Canada: 866-882-8088 USA: 888.896.6881



www.allpoweramerica.com



## Using a generator indoors WILL KILL YOU IN MINUTES.

# **Carbon Monoxide**

Generator exhaust contains high levels of carbon monoxide (CO), a poisonous gas you cannot see or smell. If you can smell the generator exhaust, you are breathing CO. But even If you cannot smell the exhaust, you could be breathing CO.

• NEVER use a generator inside homes, garages, crawlspaces, or other partly enclosed areas. Deadly levels of carbon monoxide can build up in these areas. Using a fan or opening windows and doors does NOT supply enough fresh air.

 $\cdot$  ONLY use a generator outdoors and far away from open windows, doors, and vents. These openings can pull in generator exhaust.

Even when you use a generator correctly, CO may leak into the home. ALWAYS use a battery-powered or battery-backup CO alarm in the home.

If you start to feel sick, dizzy, or weak after the generator has been running, move to fresh air RIGHT AWAY. See a doctor. You could have carbon monoxide poisoning.

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#### WARNING:

PLEASE READ AND UNDERSTAND THIS MANUAL COMPLETELY BEFORE OPERATING

#### 1. SAFETY PRECAUTIONS

#### 1) EXHAUST FUMES ARE POISONOUS

• Never operate the machine in a closed area or it may cause unconsciousness and death within a short time. Operate the engine in a well ventilated area.

#### 2) FUEL IS HIGHLY FLAMMBLE AND PIOSONOUS

• Always turn off the engine when refueling.

Never refuel while smoking or in the vicinity of an open flame.

Take care not to spill any fuel on the engine or muffler when refueling.

- If you swallow any fuel, inhale fuel vapor, or allow any to get in your eyes, see your doctor immediately. If any fuel spills on your skin or clothing, immediately wash with soap and water and change your clothes.
- When operating or transporting the machine, be sure it is kept upright. If it tilts, fuel may leak from the carburetor or fuel tank.

#### 3) ENGINE AND MUFFLER MAY BE HOT

- Put the machine in a place where pedestrians or children are not likely to touch the machine.
- Avoid placing any flammable materials near the exhaust outlet during operation.

- Keep the machine away at least 1 m (3 ft) from buildings or other equipment, or the engine may overheat.
- Avoid operating the engine with a dust cover.

#### 4) ELECTRIC SHOCK PREVENTION

- Never operate the engine in rain or snow.
- Never touch the machine with wet hands or electrical shock will occur.
- Be sure to ground (earth) the generator.

## NOTE:

 Use ground (earth) lead of sufficient current capacity. Ground (earth) lead Diameter: 0.12mm (0.005 in)



• Some types of generators have no ground

bolts, so do not operate the machine in rain or snow !

While the machine is operating, don't touch it with wet hands!

#### 5) CONNECTION NOTES

- Avoid connecting the generator to commercial power outlet.
- Avoid connecting the generator in parallel with any other generator.

#### 6) BATTERY

- No smoking while handing the battery.
- The battery emits flammable hydrogen gas, which can explode if exposed to electric arcing or open flame.

• Keep the area well-ventilated and keep open flames/sparks away when handing the battery.

## 2. CONTROL FUNCTION

#### 1) ENGINE SWITCH

The engine switch controls the ignition System.

[] "ON" (run)

Ignition circuit is switched on.

The engine can be started.

□ "OFF"(stop)

Ignition circuit is switched off.

The engine will not run.

#### 2) AC AND DC PROTECTOR

The AC or DC breaker turns off automatically when the load exceeds the

generator rated output.

## **CAUTION:**

Reduce the load to within specified generator rated output if the protector turn off!





#### COMPONENTS

- (1) Fuel tank
- (2) Fuel tank cap
- (3) AC socket
- (4) DC socket
- (5) Ground terminal
- (6) AC protector
- (7) Voltmeter
- (8) Oil filter cap
- (9) Oil drain plug
- (10) Engine switch
- (11) Starter
- (12) Air filter cover
- (13) Muffler
- (14) Spark plug
- (15) Choke lever





## **3. PRE-OPERATION CHECKS**

## NOTE:

Pre-operation checks should be made each time the generator is used.

#### 1) CHECK ENGINE FUEL

- · Check fuel level with the tank cap removed.
- If fuel level is low, refill with unleaded automotive gasoline.
- Be sure to use the fuel filter on the fuel filter neck.
- Recommended fuel: Unleaded gasoline.



## WARNING:

- Do not refill tank while engine is running or hot.
- Close fuel cock before refueling with fuel.
- Be careful not to admit dust, dirt, water or other foreign objects into fuel.
- Wipe off spilt fuel thoroughly before starting engine.
- Keep open flames away.

#### 2) CHECK ENGINE OIL

- Before checking or refilling oil, be sure the generator is put on a stable and level surface with engine stopped.
- Fuel level is below the lower level line, refill with suitable oil to upper level



line. Do not screw in the oil filler cap when checking oil level.

• Recommended engine oil: SAE 30 10W-30

#### 3) GROUND (Earth)

Make sure to ground (earth) the generator.

## 4. OPERATION

## NOTE:

The generator has been shipped without engine oil. Fill with oil or it will not start.

# WARNING:

Before starting the machine, you must

check the oil level, or the engine can be damaged!

## 1) STARTING THE ENGINE

## NOTE:

- Before starting the engine, do not connect the electric apparatus to the generator.
- 1. Turn the fuel cock to "ON" .
- 2. Turn the engine switch to "ON" .





- Turn the choke level to the "|
  |" position. Not necessary if the engine is warm.
- 4. Pull the starter handle slowly until resistance is felt. This is the compression point. Return the handle to its original position and

pull swiftly. Do not fully pull out the rope. After starting, allow the starter handle to return to its original position while still holding the handle.

- 5. Warm up the engine.
- Turn the choke level back to the operating position.



7. Warm up the engine without a load for a few minutes.

## 2) USING ELECTRIC POWER

#### 1. AC PROTECTOR

(a) Check the voltmeter or pilot lamp for proper voltage.(Some machines or not equipped with these features.

(b) Turn off the switch(s) of the electrical appliance(s) before connecting to the generator.

(c) Insert the plug(s) of the electrical appliance(s) into the receptacle.

# **CAUTION:**

- Be sure the electric apparatus is turned off before plugging in.
- Be sure the total load is within generator rated output.
- Be sure the socket load current is within socket rated current.

## NOTE:

When the circuit breaker or no-fuse breaker turns off during operation, the generator is overloaded or the appliance is defective.

## 2. BATTERY CHARGING SOCKET (OPTION)

## **CAUTION:**

1. This socket may be used for charging 12 V/8.3A batteries only.

2. When charging, connect the charging cables to the battery terminals

and then to the DC battery charging socket of the generator.

3. The leads must be connected making sure of the (+) and (-)

polarity.

#### 3) STOPPING THE ENGINE

- Turn off the power switch of the electric apparatus or unplug the cord from receptacle of the generator.
- 2. Turn the engine switch to "OFF" .
- 3. Turn the fuel cock lever to "OFF" .



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# 5. OIL SENSOR

- The oil sensor detects the fall in oil in the crankcase and automatically stops the engine when the oil level falls down below the safety limit.
- When the engine stops antomatically, check the oil level.
- If the engine can not start by usual starting procedures, check the oil level.



## 6. PERIODIC MAINTENANCE

## 1) MAINTENANCE CHART

Regular maintenance is most important for the best performance and safe operation.

Item	Remarks	Per- operation check (daily)	Initial l months or 20 H	Every 3 months or 50 Hr	Every 6 months or 100Hr	Every 12 months or 300Hr
Spark Plug	Check condition adjust gap and clean. Replace if necessary.	•		•		
Engine Oil	Check oil level	•				
Engine Oil	Replace		•	•		
Air Filter	clean. Replace if necessary.			•		
Fuel Filter	Clean fuel cock filter. Replace if necessary.				•	
Value Clearance	Check and adjust when engine is cold.					•
Fuel Line	Check fuel hose for crack or damage. Replace if necessary.	•				
Exhaust System	Check for leakage. Retighten or replace gasket if necessary.	•				
Carburetor	Check choke operation.				•	
Cooling system	Check for damage.					•
Starting system	Check recoil starter operation.	•				
Decarboni- zation	More frequently if necessary.					•
Fittings / Fasteners	Check all fittings and fasteners correct if necessary.				•	

#### 2) ENGINE OIL REPLACEMENT

- Place the machine on a level surface and warm up the engine for several minutes. Then stop the engine.
- 2. Remove the oil filler cap.
- Place an oil pan under the engine. Remove the oil drain plug so that the oil can be completely drained.
- Check the oil drain plug, gasket, oil filler cap and 0-ring. If damaged replace.
- 5. Add engine oil to the upper level.
- 6. Reinstall the oil drain plug.

# CAUTION:

Be sure no foreign material enters the crankcase.

#### 3) AIR FILTER

Maintaining an air cleaner in proper condition is very important. Dirt induced through improperly installed, improperly serviced, or inadequate elements damages and wears out engines. Keep the element always clean.

1. Take out the air cleaner, clean it well in kerosene and dry it.









2. After wetting the element by clean engine oil, squeeze it tight by hand.

3.Lastly, put the element in the case and install it securely.

## CAUTION:

The engine should never run without the element; excessive piston

and/or cylinder may wear.

## 4) MUFFLER

# WARNING:

- The engine and muffler will be very hot after the engine has been run. Avoid toughing the engine and muffler while they are still hot with any part of your body or clothing during inspection or repair.
- 1. Remove the muffler from the engine.
- Clean the carbon deposits out of the muffler using a wire brush.
- 3. Check the muffler, Replace it if damaged.
- 4. Install the muffler to the engine.



## 7. TROUBLE SHOOTING

#### 1) Engine fails to start

1. Fuel system

No fuel supplied to combustion chamber.

- No fuel in tank Supply fuel.
- Clogged fuel line Clean fuel line.
- Foreign matter in fuel cock Clean fuel cock or if closed, open it.
- Clogged carburetor Clean carburetor.
- 2. Engine oil system Insufficient
- Oil level is low Add engine oil.
- Electrical systems
   Poor spark
- Spark plug dirty with carbon or wet Remove carbon or wipe spark plug dry.
- Faulty ignition system Consult dealer.
- 4. Compression insufficient
- Worn out piston and cylinder Consult dealer.
- Loose cylinder head nuts Tighten nuts properly.
- Damaged gasket Replace gasket.
- 5. Choke lever
- If the cheke lever is not in proper position, set it to close position. (After the engine runs, set the cheke lever to open position.)

#### 2) No electricity is generated at receptacle

1. AC protector

Check to make sure the AC protector is in the on position.

#### Spark Plug Cross Reference: NGK BPR6EA or DENSO W20EXR-U



2. Appliance

Check whether the appliance has been connected to the generator when the engine is started.

Disconnect the appliance from receptacle.

3. Control box

Check wire leads in control box for loose connections. Secure connections if necessary.

# 8. STORAGE

Long-term storage of your machine will require some preventive procedures to guard against deterioration.

- Pour in about 2~3cc SAE 10W30 or 20W40 motor oil into the cylinder with the spark plug removed. Drain the fuel from the carburetor completely.
- 2. Use the recoil starter to turn the engine over several times (with ignition cap off).
- Pull the recoil starter until you feel compression.
- 4. Stop pulling.
- 5. Draim fuel from the tank carefully.
- 6. Clean exterior of the generator and apply a rust inhibitor.
- Store the generator in a dry, well-ventilated place, with the cover place over it.
- 8. The generator must remain in a vertical position.

# NOTE:

After a long-term storage of your machine, change the engine oil before it starts.



## 9. SPECIFICATION

	Model	APG3014		
G	Туре	Brush		
ENE	Rated AC Output( W )	1400W		
GENERATOR	Max. AC Output(W)	2000W		
OR	Frequency(Hz)	60Hz		
	Model	JF154		
_	Bore×Stroke(mm×mm)	54×38		
ENGINE	Displacement(ml)	98.5 ml		
NE	Max. AC Power(W)	2000W (3600 RPM		
	Right Crankacse Form	Crankcase Cover		
	Overal Dimension(L×W×H)( in )	8.54x14.25x15.35		
SET	Net Weight ( lbs)	54.56 lbs.		
	Gross Weight (lbs)	56.76 lbs.		
ST	AC Socket	•		
AND	AC Circuit Breaker	•		
ARE	AC Socket	•		
FE.	Engine Switch	•		
IUI	Pilot Lamp	•		
RES	Oil Alert	•		
STANDARD FEATURES OPTIC	DC socket (8.3A@120V)	0		
ION	DC Circuit Breaker	0		

• Specifications subject to change without prior notice.

Spark Plug Cross Reference: NGK BPR6EA or DENSO W20EXR-U

# 10. WIRING DIAGRAM



Symbol	Parts Name	Symbol	Parts Name Oil senser		
ENG.	Engine	OS			
SP	Spark plug	SC	Auxiliary winding		
FC	Field winding	V	Voltmeter		
МС	AC winding	С	Capacitor		
AC BR.	AC circult breaker ST. MC		Stator winding		
D1	Rectifier	T.C.I	T.C.I unit Wire Colour		
Symbol	Wire Colour	Symbol			
Y/G	Yellow/Green	BR	Brown		
Y.	Yellow	0	Orange		
R	Red O/G		Orange/Green		
B Black		BL	Blue		